# Tag questions

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## 1 Introduction

This chapter[1] is concerned with tag questions, both of the sort in (1) and those in (2):

(1) Kima is(n't) graduating this year, { right / no / yeah / eh / huh / … } ?

(2) a. Trina has taught syntax before, hasn't she?
b. Their ticket would still be valid, wouldn't it?

Tag questions are chimeras: bipartite sentences with seemingly mismatched and contradictory pieces. In the typical case, the first piece of a tag question asserts the truth of some proposition, only for the second piece to then directly question it. Yet the result is perfectly coherent, consistent, and Griceanly cooperative, not (necessarily) entailing any deep-seated internal conflicts or schizophrenia on the part of the individual who utters it. Neither are they some parochial quirk of English (certain prior claims in the literature notwithstanding): tag questions like (1) are commonplace across the world's languages, and even those of the sort in (2) have a broader distribution than is generally assumed. Anticipating some of the discussion to come, we will see examples from several unrelated languages, including Bokyi (Obadan et al. 2016: 136), Lebanese Arabic (Sailor 2012: §4.2.4), and Mursi (Worku 2021: 511):

(3) a. Ekpang ó ryí byirying, ó da ryí dí? *Bokyi (Atlantic-Congo)*
Ekpang he eat food he NEG eat Q
'Ekpang ate food, didn't he?'

b. ma ʔeder ħanna yiftaħ l-ʕilbeh, ʔeder shi *Lebanese Arabic (Afro-Asiatic)*
NEG was.able John to.open the-box, was.able Q
'John wasn't able to open the box, was he?'

[1] The glosses throughout this chapter include the following abbreviations: 1 = first person; 2 = second person; 3 = third person; ACC = accustive; AFF = affirmative; AGR = subject agreement marker; CL = classifier; CONF = confirmational; COP = copula; DEF = definite; DIST = distal; ERG = ergative; EXCL = exclamative; FUT = future tense; IMPF = imperfective; INT = interrogative mood; M = human masculine; NEG = negation; NEUT = neuter; NFUT = nonfuture; NMLZ = nominalizer; NOM = nominative; OBJ = object; PAST = past tense; PERF = perfective aspect; PL = plural; PN = pronoun; POSS = possessive; PRED = predicate; PRES = present tense; PROG = progressive; PRT = particle; PTCP = participle; Q = question marker; RL = realis mood; SG = singular; SIM = simple aspect; SP = specific; SU = subject; SUGG = suggestive marker; TAG = tag-specific marker; UNR = unrealized aspect; WH = wh-question.

c. àŋè k-án-í támárí, ŋà=k-án-í=ó *Mursi (Surmic)*
1SG 1SU-COP.IMPF-1SG.SU.IMPF student NEG.IMPF=1SU-COP.IMPF-1SG.SU.IMPF=NEG
'I am a student, aren't I?'

Indeed, the field's enduring interest in tag questions as a phenomenon – particularly those such as (2) and (3) whose forms are context-dependent – is likely sustained by an unexamined assumption that there is something uniquely English about them. If that is indeed why they are an evergreen topic, then a central goal of this chapter is to make tag questions substantially less interesting.

So I have set the bar low for myself, and yet it may still be too high to clear: the fact is that tag questions exhibit a range of intriguing properties, particularly once we cast the empirical net as widely as we will here. Moreover, in spite of its popularity, this topic has never (to my knowledge) received a survey-style treatment of the sort to come. I therefore feel the weight of some responsibility to the considerable body of early generative literature on tag questions from the 1960s-70s, little of which receives the attention it deserves in contemporary work on the topic. I review much of this literature in §2 as I describe what I take to be the core properties of the phenomenon, focusing there and throughout the coming discussion on syntactic properties in particular. This will serve as our point of departure.

Led by the evidence, it will be the position of this chapter that each of a tag question's two pieces corresponds to a clause, the second of which is interrogative. A great deal of the discussion will therefore concern the means by which these interrogative tag clauses attain their diminished stature—that is, what mechanism of *ellipsis* is applied to them, what properties follow from this, and what conclusions we may draw about the syntax of the languages that exhibit tag questions of one or the other type exemplified above. Along the way, I develop an account of the asymmetric distribution of tag questions like those in (1) vs. those in (2)-(3) across the world's languages, based on the asymmetric distribution of the ellipsis processes required to derive them. Since ellipsis has been a busy and important research area in our field for some time, we will also consider what broader implications tag questions might have for the theory of ellipsis more generally. All of this is the work of §3.

Readers unwilling to take my word for it that tag clauses are truly interrogatives will have their patience rewarded in §4. By way of a case study of closely-related but highly understudied languages – those on the Northwestern Kuki-Chin subbranch of the Sino-Tibetan family – that section presents a microtypology of question-marking strategies found within tag clauses. Despite their close genetic and geographic proximity, these languages use diverse strategies for marking polar questions; and, across the board, we see these same strategies arising in their tag clauses as well. Some of these languages additionally make use of special morphology evidently not found outside of tag question environments, so, before concluding, the chapter considers whether tag clauses enjoy their own special interrogative clause type. Neither these theoretical questions nor the data that animate them have been considered in this way previously, so this chapter's novelty is especially concentrated in this section. This case study also serves to further illustrate some of the major properties of tag questions, while also highlighting areas in which additional research is needed.

## 2 Core properties of tag questions within and across languages

To get this study off the ground, we will first need to fix some terminology and definitions for tag questions and their pieces (§2.1). We can then begin taking account of their core descriptive properties, starting with a basic taxonomy of tag questions types across languages (§2.2). As the discussion in this section progresses, we will move slowly away from the purely surface-descriptive properties of tag questions, and begin to consider some of their more formal characteristics, focusing in particular on the class of tag questions exemplified earlier in (2)-(3).

Although this chapter is mostly concerned with the (morpho)syntactic properties of tag questions, their interpretive properties as non-canonical polar questions cannot be overlooked, particularly in the context of this volume. I therefore survey a sample of the sizable literature on this topic (§2.3), but, for reasons that will become clearer as the discussion proceeds, there is some reason to believe that the semantics of tag

clauses simply reduces to the semantics of (biased) polar questions.

The final two parts of this section focus squarely on the formal relationship that holds between the two clausal pieces of a tag question. Tag clauses have the property that they are maximally anaphoric to the host clause that they combine with, and this has several noteworthy consequences for the behavior of the material within the tag clause (§2.4). Historically, this tight relationship has been misunderstood as a requirement that the tag clause be a literal (reduced) copy of its host clause, thus motivating a class of analyses that inflexibly generate tag clauses that are strictly isomorphic to their host clauses. However, no such requirement in fact holds: reduced cleft tags provide a consistent (if theoretically challenging) source of non-isomorphism between the two clauses (§2.5).

## 2.1 What are tag questions? Terminology and definitions

Throughout this chapter – and as anticipated in the discussion above – I will adopt the following terminology to refer to tag questions and their major constituents:

(4) *tag question* (TQ)

Siobhan arrived yesterday, { right / didn't she } ?

*host clause* (H) — *tag clause* (T)

As an initial characterization of tag questions (henceforth *TQs*), we can make the following two observations. Semantically, a prototypical TQ involves the juxtaposition of an assertion with a (biased) question seeking confirmation of the asserted content. Syntactically, a prototypical TQ involves asyndetic clause-chaining of a declarative clause followed by a reduced interrogative clause anaphorically linked to the declarative. This characterization would probably be sufficient for a cursory discussion of TQs, but given our ambitions in this chapter, some attempt at a proper definition is perhaps in order.

Defining TQs turns out to be a challenge, particularly once we see come to see just how diverse the phenomenon really is (as we will turn to immediately below). For reasons that will become clearer as the discussion proceeds, I offer in (5) a syntactico-semantic definition of TQs:

(5) In a language L, a sentence $S_{TQ}$ is a *tag question* iff $S_{TQ}$ comprises a host H and a tag T (such that $S_{TQ}$=H+T), where:
   a. $S_{TQ}$ expresses both an assertion and a (potentially biased) question;
   b. H and T are construed asyndetically;[2]
   c. In the absence of T, H would still be a well-formed sentence in L; and,
   d. T is an interrogative clause reduced by an independently-available ellipsis process in L.

Inelegant as it is, this semi-formal definition will have the virtue of being durable when confronted with the full empirical landscape of TQs across languages.

Note that from (5) I am purposefully omitting – perhaps foolishly – reference to other levels of linguistic description at which TQs clearly have salient properties. For example, English TQs have various noteworthy prosodic properties, but I am skeptical that a crosslinguistically-valid definition of tag questions based on their prosody can be formulated,[3] especially since no substantial crosslinguistic study of tag question prosody has yet been conducted (to my knowledge).

[2] A complicating factor with respect to (5b) is that disjunction markers are a very common source for the grammaticalization of Q-particles, meaning the two are often homophonous; see Bailey (2013: §6.2.1) and Kuteva et al. (2019: 306-308). As such, care may be required to distinguish a possible tag clause containing a Q-particle from the second disjunct of an alternative question.

[3] A reasonable attempt at such a definition (from Sailor 2009: 3) falls short even just for English: "A string S is a 'tag clause' if, for a semantically non-interrogative host clause H, the pronunciation of S in a distinct prosodic phrase immediately following H has the effect of introducing a question about (some part of) the denotation of H". Given the existence of 'integrated' / 'post-nuclear'

Confining the discussion just to the syntactic and (to a much lesser extent) semantic properties of TQs, then, I justify various aspects of this definition below, starting in the next subsection with some descriptive and taxonomic background (addressing, for example, (5a-c)).

## 2.2 A taxonomy of tag question types

Under the definition in (5), two basic types of TQs emerge: the 'invariant' type that we saw above in (1), and the 'dependent' type found in (2)-(3). Descriptively, these two basic TQ types are distinguished according to whether the shape of the TQ is in some way sensitive to or dependent upon that of its host clause (assuming the latter is in principle a viable host for a TQ).

With invariant TQs (henceforth *ITQs*) such as (1), the choice of tag clause does not depend on the formal properties of the host clause: for example, the well-formedness of a TQ involving the tag clause *right?* is not contingent upon the host clause's polarity (affirmative vs. negative), or any other morphosyntactic feature.[4] The opposite is true of dependent TQs (henceforth *DTQs*) such as (2)-(3), where one or more morphosyntactic features of the tag clause seem to match (i.e., covary with) those of its host: for example, the well-formedness of a TQ involving the tag clause *hasn't she?* is dependent in part on the host clause's polarity, its inflectional properties (i.e., tense and aspect), and its subject's φ-features.

Across languages, polarity seems to have a privileged status in the formation and distribution of DTQs (as it does with biased polar interrogatives; this is no coincidence, as I argue below). As such, DTQs can be further classified according to whether the polarity of the tag clause matches or contrasts with that of its host clause (Klima 1964, Huddleston 1970, Oehrle 1987, McCawley 1998: 501-510, Axelsson 2011, among others). For English, all four possible combinations of host-TQ polarity are attested (Tottie and Hoffmann 2006); however, the usage and interpretation of the POS-POS type is said to differ significantly from that of the reverse-polarity types, and the NEG-NEG type has a highly restricted dialectal distribution (see e.g. Cattell 1973):

(6) *English DTQs: Reverse-polarity and same-polarity*

| | | |
|---|---|---|
| a. | Arev has run a marathon before, hasn't she? | POS-NEG |
| b. | Arev has run a marathon before, has she? | POS-POS |
| c. | Arev hasn't run a marathon before, has she? | NEG-POS |
| d. | %Arev hasn't run a marathon before, hasn't she? | %NEG-NEG |

This is a clear point of variation across languages. In her crosslinguistic study of 11 languages with DTQs, Axelsson (2011) shows that while all 11 allow reverse-polarity TQs, only eight of those also allow same-polarity TQs (see Axelsson 2011: 827 for discussion). For example, Bokyi (boky1238; Atlantic-Congo; Nigeria)[5] – a language not included in Axelsson's sample – is one such language that only allows reverse-polarity DTQs (Obadan et al. 2016: 136):[6]

tag questions (discussed at length in Ladd 1981, Dehé and Braun 2013, and Gómez González and Dehé 2020), distinct prosodic phrasing is not a definitional property of tag clauses. Note that there is a long tradition of work on the intonational properties of English tag questions, and I cannot adequately review it here. Important works on this topic include O'Connor (1955), Pope (1972: ch. 4), Ladd (1981), Bolinger (1989: 115-133), Reese (2007: §3.2.2), Reese and Asher (2007), Dehé and Braun (2013), Jamieson (2018: §4.3.5), and Gómez González and Dehé (2020), among others.

[4] This is something of an idealization: as noted in Moravcsik (1971: 94 fn. 8) and elsewhere, for a given host clause, the choice among potential ITQ tag clauses is not free, and in some cases there may even be an effect of polarity. See Axelsson (2011: §4) for more discussion. (Following Axelsson, my use of the term 'invariant' refers collectively to three subcategories of TQs she identifies as *neutral question tags, polarity-based question tags,* and *polarity-dependent question tags.* See also fn. 7.)

[5] From this point on in the chapter, the first time any non-Indo-European language and/or (sub)family is referenced in the text, I also provide its *glottocode* (Hammarström et al. 2025), its language family, and the main countries where it is spoken. In cases where a language's genealogical classification (up to and including the preferred name for that classification) is disputed, I defer to the relevant Glottolog entry as of version 5.2 (*ibid.*).

[6] In Bokyi and many other languages, a full lexical verb can or must appear in a DTQ's tag clause. By contrast, English and certain other languages disallow lexical verbs in DTQ tag clauses, instead requiring an auxiliary or a modal. As originally noted in Sailor (2009), this is a principled point of variation across languages: it directly reflects the type of predicate ellipsis a given language allows (in particular, whether it allows Aux(iliary)-stranding vs. V(erb)-stranding ellipsis; see §3 below for discussion). Given this

(7) *Bokyi DTQs: Reverse-polarity only*

a. Ekpang ó ryí byirying, ó da ryí dí? POS-NEG
Ekpang he eat food he NEG eat Q
'Ekpang ate food, didn't he?'

b. *Ekpang ó ryí byirying, ó ryí dí? *POS-POS
Ekpang he eat food he eat Q
*Intended:* 'Ekpang ate food, did he?'

c. Okon ó da ce Calabar, ó cé dí? NEG-POS
Okon 3SG NEG go.PAST Calabar 3SG go.PAST Q
'Okon didn't go to Calabar, did he?'

d. *Okon ó da ce Calabar, ó da cé dí? *NEG-NEG
Okon 3SG NEG go.PAST Calabar 3SG NEG go.PAST Q
*Intended:* 'Okon didn't go to Calabar, didn't he?'

Further still, DTQs can be classified by the variety of possible clause types that their hosts may have (as can ITQs, left aside here). While canonical examples all involve declarative hosts, a variety of other clause types are attested in English as well (with some caveats: for early discussion of non-declarative hosts, including the highly restricted distribution of interrogatives, see Huddleston 1970 and Cattell 1973; the examples below are from the former):

(8) *English DTQs: Non-declarative host clause types*

a. Come early, won't you? *Imperative*

b. Let's go today, shall we? *Hortative*

c. How elegantly she dresses, doesn't she? *Exclamative*

At least some other languages are similar to English in this regard. For example, Chothe (chot1239; Sino-Tibetan; India) is reported to allow DTQs with the same set of host clause types as English (data below from Singh 2000: §6.3.5; see §4.1.1 below for further discussion of Chothe TQs):

(9) *Chothe DTQs: Host clause types*

a. əmo iskul tʰiŋ-ŋe, tʰiŋ-no-mo *Declarative*
he school go-SFP go-NEG-Q
'He goes to school, doesn't he?'

b. tulu-ha e-wo, e-əŋ-no-mo *Imperative*
work-DIST do-IMP do-UNR-NEG-Q
'Do that work, won't you?'

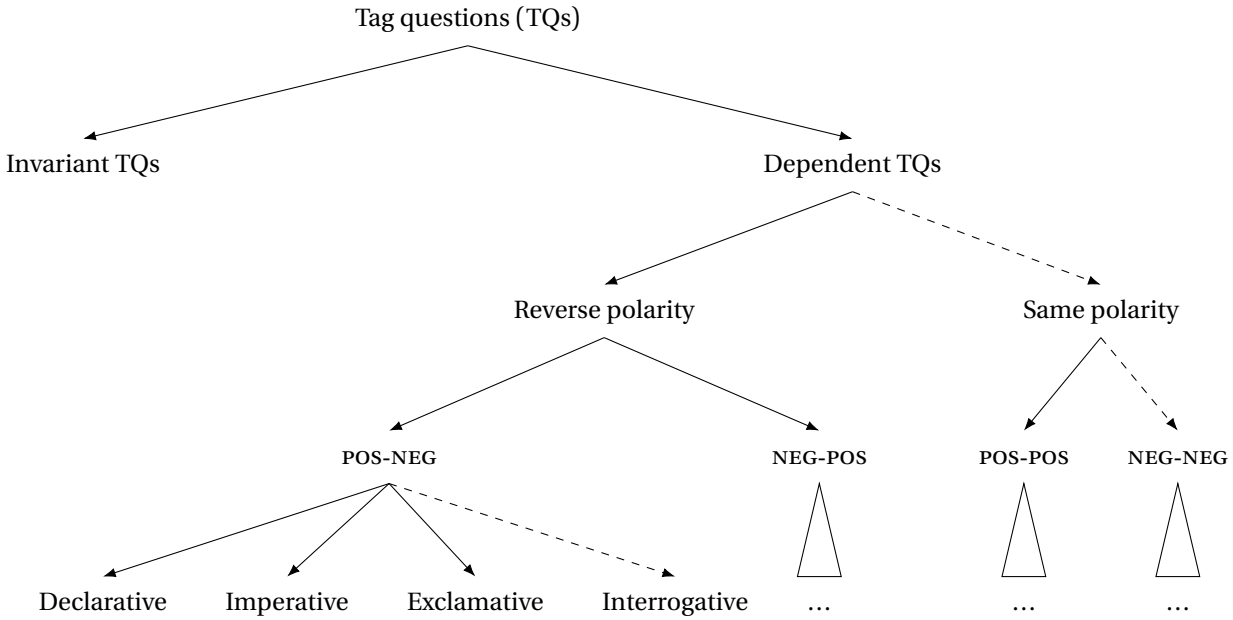
c. kə-ni bu bək-səruy, bək-səruy-mo *Hortative*
1-PL rice eat-SUGG eat-SUGG-Q
'Let's eat rice, shall we?'

d. iya ənt$^{h}$a-pə numəyte-me, ənt$^{h}$a-mo *Exclamative*
how.much nice-NMLZ girl-WH.Q, nice-Q
'How nice the girl is, is she?'

Putting all these observations together, we arrive at the coarse taxonomy for TQs depicted in (10), with dashed arrows reflecting more restricted patterns than the alternative(s) under each branching node:

fact, a reviewer points out that we should expect all languages to behave like Bokyi in disallowing same-polarity DTQs, contrary to fact: as Stockwell (2022) argues, predicate ellipsis requires an antecedent that sets up a proper contrast, and yet same-polarity DTQs involve no such contrast. I leave this issue open.

(10) *Coarse taxonomy of TQs*




This is not intended to be comprehensive, nor will I fully explore each type implicated by this taxonomy.[7] Instead, the discussion to come focuses almost exclusively on canonical DTQs with reversed polarity and declarative hosts.

### 2.3 Bias and the interpretation of tag questions

The generative literature on TQs is vast: they were the subject of intense study starting in the Transformational Grammar era and continuing through Extended Standard Theory (see, among others, Klima 1964, Arbini 1969, Huddleston 1970, Culicover 1971: §2.3, Sadock 1971, Cattell 1973, Hudson 1975: §4.2, and Bublitz 1979). While generative work on TQs noticeably waned with the transition to Government & Binding Theory (but see e.g. Culicover 1992), the last 15-20 years have seen a renewed interest in the phenomenon coinciding with the explosion of work on the semantics of biased questions on the one hand, and the syntax-pragmatics interface on the other (specifically, work in speech act syntax and/or the 'syntacticization of discourse').

While the early literature on TQs was primarily concerned with capturing the surface properties of DTQs in particular (e.g. restrictions on the types of clauses that can serve as hosts, the apparent 'copying' of material from the host into the tag, etc.), part of this second wave of work on TQs focuses almost exclusively on their meaning—in particular, their status as (potentially) biased non-canonical questions. In this respect, the renewed interest in TQs can be seen as an epiphenomenon of a broader trend in the early 2000s toward the formal modeling of biased polar questions, particularly those involving negation (for some of the seminal works initiating this trend, see Büring and Gunlogson 2000, van Rooy and Šafářová 2003, Romero and Han 2004, and Reese 2007; for very recent surveys of relevant work on the semantics of bias and/or negation in polar questions, see Romero 2024, Frana this volume, and Goodhue this volume).

This renewed interest in TQs can also be traced to a second but related strand of research that similarly arose in the early 2000s, building on intuitions from Ross (1970): namely, work concerned with modeling speaker-hearer interactions using the tools of formal syntax. Significant works in this strand include Speas and Tenny (2003), Hill (2007), and Haegeman and Hill (2013); see Wiltschko (2021: §2.6) for a recent survey of work adopting this so-called neo-performative hypothesis.

Combining aspects of one or both of these more general research trends, a raft of new work on the

[7] See Axelsson (2011: §4) for a finer-grained taxonomy (involving e.g. a cline from least to most dependent restrictive tag-host combinations) and a more systematic treatment of the TQ types it implicates. See also fn. 4.

meaning and use of TQs has arisen in recent years. Individual analyses vary widely[8] – in this volume alone, at least three different approaches to TQs can be found (see Goodhue this volume, Rudin this volume, and Wiltschko this volume) – but what unifies these works is their emphasis on the semantics and pragmatics of TQs and, in some cases, their answers. Examples of recent work on TQs adopting such approaches include Krifka (2015), Malamud and Stephenson (2015), Jamieson (2018; to appear), Woods and Roeper (2025), Bill and Koev (2025), and Roberts and Rudin (2024). For useful surveys of this literature on TQs, see Jamieson (2018: §4.3.5) and Bill and Koev (2025: §5).

A basic claim of the present study (to be justified in §3) is that tag clauses such as those in (11) are underlyingly (biased) polar interrogatives of the sort in (12) whose reduced stature is derived via ellipsis (represented with ~~strikethrough~~ below):

(11) a. The candidate is feeling confident, isn't she ~~[feeling confident]~~?
b. The candidate isn't feeling confident, is she ~~[feeling confident]~~?

(12) a. Isn't she feeling confident?
b. Is she feeling confident?

This view has been promoted in one form or another since some of the earliest generative studies on tag questions (e.g. Huddleston 1970), and supported at length in Sailor (2009).[9] If that analysis has merit – an empirical question that we will grapple with at the end of the chapter – then nothing special would need to be said about the semantics of tag clauses in particular; the question of their semantic analysis would be unified with whatever the proper analysis of polar interrogatives such as (12) is. Fortunately, a great deal of progress along those lines has been made independently of tag questions: see Romero (2024) and Goodhue (this volume) for up-to-date surveys of work on the semantics of biased polar questions.

The meaning of tag questions as a whole follows closely but not entirely from this. Typically, tag questions involve the juxtaposition of a polar interrogative clause with a declarative clause asserting the same propositional content or its polar opposite (setting aside non-declarative hosts; see Hudson 1975: §4.3). A longstanding position in the literature on tag questions is that the juxtaposition of these two pieces gives rise to inferences that go beyond the ordinary semantics of each piece individually. Perhaps the earliest attempt to develop this idea is Hudson (1975: §4.2), whose central claim is that the bias (or 'conduciveness') of TQs arises pragmatically, as a natural consequence of the differing *sincerity conditions* on declaratives versus polar interrogatives (both being involved in the composition of a TQ). According to Hudson, because an interrogative tag clause and its declarative host clause necessarily refer to the same proposition, the pragmatics of a TQ simply involves taking the union of these two sets of sincerity conditions (possibly also influenced by the prosodic properties of TQs: Roberts and Rudin 2024):

(13) *Sincerity conditions for polar interrogatives* (adapted from Hudson 1975: 12)
The speaker S believes that the addressee A knows at least as well as S does whether the proposition $p$ is true or false.

[8] For example, several recent proposals analyze TQs as built from (covert) disjunction or conjunction structures relating the tag clause to its host, though they differ substantially in their details: see e.g. Asher and Reese (2005), de Clercq (2013: §8.2.1), Krifka (2015: §5), Holmberg (2016: §4.8.2), and Tubau (2020: §2.5).

[9] See Woods and Roeper (2025; this volume) for recent counterarguments to this view based on acquisition data indicating that negative polar questions are acquired later than TQs with negative tag clauses (but see Thornton and Tesan 2013: §4.4 for the opposite result, albeit based on a proper subset of Woods and Roeper's child language sample). If negative tag clauses are simply elided negative polar questions, then this result is indeed unexpected; however, it does not speak directly against the ellipsis analysis either, since there may be non-syntactic factors responsible for TQs appearing earlier in child production than full negative questions (perhaps having to do with speech planning, with tag clauses being facilitated by their obligatory cooccurrence with a nearly identical declarative host). Given the preponderance of direct evidence favoring an ellipsis analysis reviewed here – evidence uncontested by Woods and Roeper – this alternative seems to be the more promising approach to the acquisition data.

(14) *Sincerity conditions for declaratives* (adapted from Hudson 1975: 24)

S believes that $p$ is true.

The logic of Hudson's argument is as follows. Polar interrogatives can have either a biased or an unbiased (neutral information-seeking) interpretation. The unbiased interpretation is only felicitous in contexts where A believes that S does not know whether $p$ is true or false. The host clause of a TQ clearly establishes that S believes $p$ to be true; thus, A will rule out an unbiased interpretation for the tag clause, leaving only a biased interpretation (for example if S knows $p$ is true, and knows that A believes that too, but S wants to signal to A that S is aware of this: see Hudson 1975: 17). For a contemporary formal implementation of Hudson's core intuition, see Roberts and Rudin (2024).

This brief discussion of the interpretive properties of tag questions is certainly not exhaustive (for example, it sets aside the meaning and use of TQs with non-declarative hosts; see Hudson 1975: §4.3 for an extension of the preceding analysis to such cases), and it hardly does justice to the volume of relevant literature on the topic, only some of which is cited above. It also contains no mention at all of the many discourse and conversational functions that TQs can have (on which a considerable body of scholarship exists: see Kimps 2018 for a recent and comprehensive picture). The fact is that we will have our hands completely full just with the syntactic and distributional properties of TQs alone; so, in what remains of this chapter, I largely set aside the semantics and pragmatics of TQs, and hope that the references cited above will set the interested reader on the right path for those topics.

## 2.4 Anaphoric properties of tag questions

This subsection briefly reviews some of what the published literature has identified as the most salient surface properties of tag questions.[10] These properties are not directly related to the interrogative status of TQs (on which see §4), but rather stem from the strongly anaphoric character of TQs. The content of this subsection therefore reflects the state of the existing literature, insofar as it provides an overview of generalizations primarily drawn from English, and from English DTQs in particular. Treatment of TQs beyond English is deferred to the later sections (and see §3.2 on ITQs in particular).

As noted in many places throughout the literature (Klima 1964, Knowles 1980, Culicover 1992, Rezac 2013, among others), TQs are maximally anaphoric to their host clauses. This results in a clustering of related properties: pronominal subjects, obligatory reduction (i.e., ellipsis), and a general prohibition against discourse-new material within the tag clause.[11]

### 2.4.1 Pronominal subjects

Where present, the subjects of TQs are obligatorily pronominal (and if the language would allow *pro*-drop of the subject elsewhere, it appears to be required in TQs). This is trivially true in TQs involving clefts, whose subjects are expletives; it is more noteworthy when the TQ subject is coreferential with the host clause's subject, as in DTQs:

(15) Caitríona hasn't left yet, has {she / *Caitríona}?

This requirement can even give rise to patterns of pronominal reference that would be ill-formed outside of DTQs (and retorts: Sailor 2014: §3.3.2). For example, Ross (1973) shows that the subject of a DTQ can take certain idiomatic DPs as antecedents, even though such DPs normally resist pronominal reference elsewhere:

[10] Other salient properties of TQs not discussed here include their intonation (see references in fn. 3), as well as constraints on embedded construals for TQs, e.g. *I suppose John is gone, isn't he?*, on which see Lakoff (1969), Huddleston (1970: 216), Cattell (1973) on *buck-passer* verbs, and Kay (2002: §5). For more descriptive properties of TQs that I am not able to cover here, see Quirk et al. (1985: §11.8), McCawley (1998: 501-510), Huddleston and Pullum (2002: §10.5), Sailor (2009: §3), and Axelsson (2011).

[11] See Sailor (2014: §3.3) for discussion of another phenomenon exhibiting these properties, namely *retorts*, i.e. particular sentence types which deny the truth of a preceding assertion.

(16) Some headway$_i$ has been made on problem X,
   a. hasn't it$_i$?
   b. ?*but it$_i$ hasn't (been made) on problem Y.

Similarly, in unpublished work, Rezac (2013) shows that weak definites (i.e., *the*-headed DPs such as *the hospital* which lack aspects of the ordinary meaning of definites, e.g. uniqueness) can serve as the antecedents for a pronoun in a tag clause, whereas pronominal reference to similar-looking DPs elsewhere requires an ordinary definite reading (adapted from Rezac 2013: 10):

(17) The radio$_i$ let you know that bad weather was coming,
   a. didn't it$_i$? *(nonunique reading of* it *possible)*
   b. #yet you just turned it$_i$ off and went hiking anyway. *(only unique reading of* it *possible)*

For related facts from DTQs involving pronominal reference to epithets, nonreferential (e.g. quantificational) DPs, and split antecedents, see McCawley (1998: 503-510), Sailor (2009: §3), Rezac (2013: §2), and Sailor (2014: §3.3.2), as well as §2.5 below.

### 2.4.2 Obligatory reduction

At least as early as Moravcsik (1971: 87), it was noted that DTQs are "never untruncated sentences: some deletion or substitution seems always obligatory". This is most apparent in the domain of the predicate (though this can also be seen in the pronominal status of the subject described above). In English, which has various types of predicate anaphora – e.g. *do so*, *do it*, *do that*, as well as full predicate ellipsis (Hankamer and Sag 1976) – we see that only the most fully reduced form, namely that involving predicate ellipsis, is tolerated in DTQs:

(18) She finished the assignment,
   a. *didn't she finish it?
   b. *didn't she do {so / it / that}?
   c. didn't she?

An intuition going back to at least Huddleston (1970) is that the tag component of an English DTQs involves a polar interrogative clause whose predicate has undergone ellipsis. This position is argued for at length in Sailor (2009: §3.2), who extends the ellipsis analysis to DTQs in several other languages as well. The arguments for predicate ellipsis in DTQs are reviewed and extended in §3 below (as are the prospects for an ellipsis-based account of ITQs), so I will not discuss them here; instead, I will only comment briefly on a particular property of this purported ellipsis: namely, its obligatoriness. Ellipsis is typically thought of as being optional, so the fact that it is apparently required in the tag clause of a DTQ sets that environment apart from at least the most run-of-the-mill cases. At the same time, though, the ellipsis literature has identified many other environments in which ellipsis of one sort or another is obligatory,[12] so tag clauses are not unique in that respect. For this reason I will not attempt to provide an account for the obligatoriness of ellipsis in tag clauses in this chapter, though I assume it is of a piece with the general pressure that tag clauses are under to be maximally anaphoric to their hosts.

[12] To name a few: fragment answers (Merchant 2004) and certain other phenomena involving a so-called move-and-delete derivation (Sailor and Thoms 2014, among others), Russian contrastive polarity ellipsis (Gribanova 2017: §4.1), British English *do*-ellipsis (Aelbrecht 2010: §4.4), English retorts (Sailor 2014: §3.3), and English comparatives involving subject-auxiliary inversion (Merchant 2003), among many others.

### 2.4.3 Neophobia

In keeping with their maximally anaphoric character, TQs generally may not introduce any discourse-new content beyond whatever is minimally necessary (including Q-marking: see §4) for the tag clause's well-formedness. In the case of ITQs, the only other new material is a polarity particle (e.g. *yeah*/*no*) or a confirmational particle (e.g. *right, huh*); in the case of DTQs, this can include a means of marking polarity in the tag clause such that it differs from the host.

In Sailor (2014: ch. 3), this allergy to discourse-new material exhibited by TQs is labeled *neophobia* (and is shown to hold of retorts as well). Its effects may be seen in, for example, a prohibition against the introduction of adverbials in the tag clause:[13]

(19) a. Raj doesn't live here, does he (*really)?
b. Kate has has finished the assignment, (*seriously) hasn't she?

For some additional discussion of neophobia, including other phenomena exhibiting this property, see Thoms and Walkden (2019: §2.2) and Weir (2024).

## 2.5 Tag-host non-identity: consequences for DTQs as structural diagnostics

Beginning with the earliest generative studies of tag questions, the collection of anaphoric properties described above inspired a class of analyses in which the tag clause of a DTQ is derived by directly copying material from the host. Though the precise implementations of such approaches vary substantially (see e.g. Klima 1964, Culicover 1992, and den Dikken 1995), what unites them is that the 'dependent' property of DTQs – i.e., the apparent identity of form that a DTQ's tag clause exhibits with respect to its host – is an inescapable by-product of their syntactic derivation (or, in the HPSG analysis of Bender and Flickinger 1999, of the lexical rule for the auxiliary that heads them).

Such approaches simultaneously undergenerate and overgenerate, however. For example, as McCawley (1998: 503-510) discusses in detail (extended in Sailor 2009: §3.1), there are several ways in which a tag clause can be at least superficially non-identical to its host (see also Pope 1972: 52):

(20) *Non-matching modals*
a. We may have to work late, {won't / *mayn't} we?
b. We ought to leave now, {shouldn't / *oughtn't} we?

(21) *Non-matching auxiliaries*
a. IBM doesn't make that model anymore, {do / *does} they?
b. N.W.A. is doing a Christmas album this year, {aren't / *isn't} they?

(22) *Non-matching subjects: expletive*-there
a. Nothing was broken, was {there / %it}?
b. Six books are on the shelf, aren't {there / %they}?
c. In the garden is a beautiful statue, isn't {there / *it}?

Any analysis of tag questions that necessarily delivers strict identity between the tag clause and its host will fail to capture such cases of mismatch (some of which are subject to dialectal/idiolectal variation), while also incorrectly predicting the matching counterparts to be well-formed. Such cases of non-identity between a tag clause and its host raise many intriguing questions, not only for the analysis of DTQs and the relevant phenomena in these host clauses, but also for the theory of ellipsis identity more generally (anticipating the discussion to come in §3). Such mismatches are clearly principled – pivoting as they do

[13] See also the *Functional Constraint on Interrogative Parentheticals* of Knowles (1980: 391), which states that TQs "are limited to seeking confirmation of the truth of the main proposition" of the host clause.

around paradigm gaps (20), group-denoting subjects (21), non-referential subjects (22), etc. – and yet even their basic properties remain to be fully investigated, making this an especially rich area for future research. See Sailor (2009: §3.1) and Rezac (2013) for additional discussion.

To these sources of tag-host mismatches, Sailor (2009: §3.1.6) adds examples such as the following, involving tag clauses that appear to be truncated clefts whose implied pivots correspond to a focused (potentially non-subject) constituent in the host (see also Childs 2021: 438; below, SMALL CAPS indicates a heavy focal accent):

(23) *Non-matching subjects: expletive*-it
[Context: two old friends recollecting stories from long ago]
a. NICK drove us home that night, wasn't it?
b. Mark wasn't arrested that MONDAY, was it?
c. Mr. Nelson usually smoked opium BEFORE class, wasn't it?

Such DTQs pose a particularly strong challenge for any analysis requiring strict form-identity between the tag clause and its host, including all copying-based approaches (however implemented).

In addition, though, these tag clauses built from clefts not found in their hosts have methodological consequences as well. In various places throughout the generative literature, linguists have occasionally sought to exploit the 'dependent' nature of DTQ tag clauses as a diagnostic to probe the structural properties of the host clause.[14] This practice goes back to Klima (1964), who, as part of his battery of diagnostics for a clause's negativity, used DTQs' tendency to be polarity-reversing to reveal the extent to which various expressions in the host clause (e.g. negative adverbs such as *seldom, rarely*, etc.) contributed proposition-level negation (see also Lakoff 1969 and Cattell 1973 on DTQs as diagnostics of negativity with NEG-raising, and Brasoveanu et al. 2014 for experimental work testing Klima's proposal). The value of DTQs as negativity diagnostics is not obviously threatened by tag-host mismatches of the above sort, since the tendency for DTQ tag clauses to reverse the polarity of their hosts (and to have markedly different semantic and pragmatic properties when their polarity is matching) seems to travel independently of whatever is involved in the licensing and derivation of the cleft-based tag clauses in (23), for example. However, other diagnostic proposals involving DTQs do not fare as well, particularly those presupposing strict form-identity between the other components of DTQs.

For instance, a variety of works have proposed using DTQ tag clauses to diagnose underlying properties of the host clause subject, based on the assumption that the tag clause subject must be strictly coreferential with it (Postal 1964: 254, Foreman 1999: 212-13, Mikkelsen 2005: 71-73, among others).[15] Take for example Barros and van Craenenbroeck (2013), who argue that DTQs can diagnose whether a fragment answer host clause has an underlying cleft source or not (example below from their (25)):

(24) Q: Who can Bill talk to?
A: Ken Safir, {isn't it / ??can't he}?

While the reduced acceptability of the matching tag clause *can't he* is potentially informative, the availability of the cleft-like tag *isn't it* by itself is not: given that such tag clauses are available even with non-cleft hosts (23), we cannot conclude anything in particular from their availability with fragmentary host clauses in (24). While it is certainly possible that the tag clause in (24) is fully isomorphic to an underlying cleft in its host, examples such as (23) make it equally likely that no such isomorphism holds (i.e., that the host fragment is derived from a non-cleft source whose antecedent is isomorphic with the wh-question that licensed it). Until future work can clarify how cases of tag-host non-identity are constrained – both in their distribution, as well as in which specific properties may be non-identical (and how) – it would be wise

[14] On the value of DTQs as diagnostics for VPE in a language, see §3.1.

[15] See also work exploiting DTQ tag clauses as diagnostics for their hosts' auxiliaries, on the assumption that the former contains copies of the latter: Postal (1964: 254), Zwicky (1970: §2), LeSourd (1976: §4), among others. An early cautionary tale about this practice may be found in Arbini (1969: 211).

to exercise caution when appealing to DTQs as structural diagnostics: at present, simply not enough is known about the implications of the data in this subsection (though see Sailor 2009: §3.1, Barros and van Craenenbroeck 2013: §5.1, and Sailor 2014: §3.3 for some discussion).

In sum, while much about the data in this subsection remains to be understood, two conclusions may be drawn about the existence of tag-host non-identity of the above sort: it undermines the value of DTQ tag clauses as structural diagnostics for their hosts (at least for some phenomena), and it poses a serious challenge for any analysis of tag questions that rigidly delivers strict form-identity between tag clause and host. For a variety of other arguments against copying-based analyses of tag clauses (however implemented), see Huddleston (1970), Hudson (1975), Bublitz (1979), Knowles (1980) and Oehrle (1987), among others.

Having ruled out one potential class of analyses for tag clauses, we turn now to a likelier source for many of the properties discussed in this section.

# 3 Tag questions: full clauses reduced by ellipsis

As mentioned above, it is far from obvious that TQs are underlyingly biclausal, particularly for ITQs. Below, I justify this claim by reviewing the available evidence and presenting new arguments that all tag clauses are underlyingly full clauses reduced by ellipsis. Along the way, I develop an account of the crosslinguistic distribution of DTQs and ITQs based on the availability of the ellipsis process required to derive them.

For now I simply assume that tag clauses are (biased) polar interrogatives, and defer justification of this to §4.

## 3.1 Ellipsis in dependent tag questions

Starting with some of the earliest generative literature on English DTQs, tag clauses have been analyzed as truncated polar interrogative clauses (e.g. Huddleston 1970 and subsequent work). Though this truncation has occasionally been implemented by means of one or more tag-specific syntactic operations (e.g. Culicover 1992, contrary to claims therein; see also the *tag_lr* rule proposed in Bender and Flickinger 1999 for an HPSG implementation), Hudson (1975) offers the earliest detailed attempt to reduce the formulation of English DTQs to only independently-needed grammatical mechanisms. One such mechanism is what is now commonly known as *ellipsis*—the principled non-pronunciation of a syntactic constituent whose putative content is nevertheless recovered anaphorically (see van Craenenbroeck and Merchant 2013 for an overview of ellipsis).

Ellipsis phenomena are traditionally identified both by what goes missing (i.e., the category/size of the elided constituent) as well as by what is left behind—specifically, by what is "stranded" adjacent to the ellipsis site. The latter is especially true of predicate ellipsis, commonly referred to as "VP ellipsis" or simply "VPE" for short (purposefully abstracting away from the precise category/size of the elided constituent for now; see below). Two superficial subtypes of VPE have been identified – *Aux(iliary)-stranding* and *V(erb)-stranding* – and depending on certain factors (i.e., the size of the elided constituent and the extent to which auxiliaries and/or main verbs raise into the inflectional domain), a given language with VPE will exhibit either one or both of these patterns.

The strongest set of arguments that the tag portion of DTQs really are full clauses underlyingly comes from Sailor (2009), who argues that the derivation of DTQs necessarily involves VPE. Based on a crosslinguistic survey of six languages with DTQs – Taiwanese, Danish, Persian, Scottish Gaelic, Samoan, and (Brazilian) Portuguese – Sailor proposes the following two universals (adapted slightly from Sailor 2009: 40; see (41) below for a revised statement of these):

(25) *Tag Question Implication*
If a language L has dependent tag questions, then L also has VPE independently.

(26) *Tag Question Universal*

Dependent tag question clauses in a language L behave like clauses reduced by VPE in L with respect to the type(s) of stranded verbal material (i.e., auxiliary and/or main verb) that can or must be found in each.

The universal in (25) captures the observation that languages with DTQs also independently have the relevant ingredients to derive reduced polar interrogatives of the hypothesized sort—in particular, VPE. This is important because, for reasons that are not well-understood, VPE is rather uncommon crosslinguistically (Merchant 2001: 3, Merchant 2006: 272). If the claim in (25) is correct, then it greatly restricts the set of languages that could have DTQs even in principle: it is a proper subset of the languages that independently allow VPE. Indeed, to the best of my knowledge, DTQs have only ever been found in languages that independently allow sentences with either an Aux-stranding or a V-stranding surface profile; they have never been reported for languages that systematically disallow such sentences (e.g. German). See §3.3.3 for more on the crosslinguistic distribution of (D)TQs.

Turning to the universal in (26), this captures the observation that any empirical quirks of regular VPE in a language – for example, any restrictions on the kinds of verbal or inflectional material that can(not) be left stranded outside of the ellipsis site – are also found in that language's DTQs. If the claim in (26) is correct, then we can think of it as a restriction on the analytical possibilities for a given language's DTQs: whatever derives them must exhibit the same empirical fingerprint as VPE in that language.

To the extent that (25) and (26) are valid – and I am unaware of any exceptions to them – they constitute a powerful argument that tag clauses in DTQs are necessarily derived by VPE (see §3.3.2 for some refinements concerning the size of the elided constituent in DTQs, along with some theoretical consequences of this). Moreover, when taken together, (25) and (26) allow us to understand (i) why tag clauses in DTQs exhibit the morphosyntactic properties that they do across all the languages that have them, and (ii) why the crosslinguistic distribution of DTQs is restricted in the way it is.

As a case in point, consider Taiwanese (taib1242, also 'Taiwanese Hokkien' or 'Taiwanese Minnan'; Sino-Tibetan; Taiwan), as discussed in Sailor (2009: §4.2.1) and reproduced below.[16] One of its strategies for forming polar questions involves the particle *kám* 'Q' in post-subject position (see Hsiao and Her 2021 for a taxonomy of polar question strategies in Taiwanese). This same marker is also present in the language's DTQs, which are of the aux-stranding variety (see §4 for more on Q-particles in TQs):

(27) *Taiwanese declaratives and polar questions*

a. A-Ying ū thȧ̍k tsit-pún tsheh
A-Ying PERF read one-CL book
'A-Ying has read the book.'

b. A-Ying kám ū thȧ̍k tsit-pún tsheh
A-Ying Q PERF read one-CL book
'Has A-Ying read the book?'

(28) *Taiwanese DTQs*

a. A-Ying ū thȧ̍k tsit-pún tsheh, (i) kám bô
A-Ying PERF read one-CL book s/he Q NEG.PERF
'A-Ying has read the book, hasn't he?'

b. A-Ying bô thȧ̍k tsit-pún tsheh, (i) kám ū
A-Ying NEG.PERF read one-CL book s/he Q PERF
'A-Ying hasn't read the book, has he?'

[16] These examples differ only orthographically from their source in Sailor (2009: §4.2.1). There are several different romanization systems for Taiwanese; the examples here are given in Tâi-Lô, which the Taiwan Ministry of Education regards as the official standard. Thanks to Conor Grimes for his help with these examples.

Given that DTQs are present in Taiwanese, the following two predictions arise: by (25), we predict that the language should also allow VPE; and, by (26), we further predict that its tag clauses in DTQs should exhibit the empirical hallmarks of clauses that have undergone VPE (e.g. according to what can or cannot be stranded). As Sailor (2009: §4.2.1) shows, both predictions are borne out. For example, although Taiwanese VPE generally allows stranding of modal and aspectual markers (e.g. *u* 'PERF'), the progressive marker *teh* cannot be stranded (see also Sailor and Kuo 2010). This same prohibition is present in its DTQs' tag clauses as well:

(29) *Taiwanese stranding (im)possibilities with VPE*

a. A-Ying ū thȧ̍k tsit-pún tsheh, A-Ha mā ū
A-Ying PERF read one-CL book A-Ha also PERF
'A-Ying has read the book, and A-Ha has too'

b. A-Ying bô teh tshī káu, tān-sī A-Ha ū (*teh)
A-Ying NEG.PERF PROG feed dog, but A-Ha PERF PROG
'A-Ying hadn't been feeding the dog, but A-Ha had been'

(30) *Taiwanese stranding (im)possibilities in DTQs*

A-Ying bô teh tshī káu, (i) kám ū (*teh)
A-Ying NEG.PERF PROG feed dog s/he Q PERF PROG
'A-Ying hadn't been feeding the dog, had he been?'

Sailor (2009) discusses several other languages with DTQs, showing that in each case, their tag clauses exhibit the hallmarks and idiosyncrasies of that language's VPE operation. This strongly suggests that such ellipsis is a crucial ingredient in the derivation of DTQs crosslinguistically.

Recently, additional support for ellipsis in DTQs was brought to light by Manetta (2020, 2021), who presents a series of diagnostics showing that Kashmiri – a Verb Second (V2) language with V-to-T movement (independent of onward V-movement to C) – allows both Aux-stranding and V-stranding ellipsis in regular declaratives (see Sailor 2018 for more on the interaction of V2 and VPE).[17] As it turns out, the language also allows DTQs (Manetta 2020: 735, 742; Manetta 2021: 15). Predictably, these may also be of either the Aux-stranding or V-stranding variety:[18]

(31) *Kashmiri V-stranding DTQs* (Wali and Koul 1997: 7)

a. su le:khi ciṭh', le:khi n-a:ʔ
he write.3SG.FUT letter write.3SG.FUT NEG-Q
'He will write a letter, won't he?'

b. su le:khi nɨ ciṭh', le:kh'-a:ʔ
he write.3SG.FUT NEG letter write.3SG.FUT-Q
'He won't write a letter, will he?'

(32) *Kashmiri Aux-stranding DTQs* (Wali and Koul 1997: 7)

a. təm' cha ciṭh' li:chimɨts, cha-n n-a:ʔ
he.ERG has letter write.PTCP has-3SG NEG-Q
'He has written a letter, hasn't he?'

b. tami cha-nɨ ciṭh' li:chimɨts, cha-n-a:ʔ
she.ERG has-NEG letter write.PTCP has-3SG-Q
'She hasn't written a letter, has she?'

[17] Manetta (2021: §3.2) argues that the elided constituent in both types is TP rather than a verbal projection, making 'VPE' a misnomer for Kashmiri. The precise category of the elided constituent in DTQs is not our primary concern here, but see §3.3.2 below for relevant discussion.

[18] According to Wali and Koul (1997: 5), *a*: 'Q' is the same particle used to mark neutral polar questions in Kashmiri. They also note that the lexical verb can surface alongside the auxiliary in the tags in (31c-d); see Manetta (2020, 2021) for the relevance of these facts to the theory of VPE and V2.

For similar findings from Portuguese and Persian, see Sailor (2009: §4.3.4) and Sailor (2012: §4.2.2), respectively. In sum, to the extent that (25) and (26) are crosslinguistically valid, as languages such as Taiwanese and Kashmiri show them to be, then VPE is an essential ingredient in the derivation of DTQs (but see §3.3.2).

Indeed, even superficially obvious counterexamples can be shown to comport with this conclusion. For example, in contexts that would normally license VPE in English, we see in Mainland Scandinavian (to varying degrees) that the pronominal *det* 'that' seemingly appears in place of the predicate instead, apparently as a predicate anaphor. This happens even in tag questions (Danish data below from Line Mikkelsen, p.c.; see Sailor 2009: §4.2.2 for more on DTQs in Danish):

(33) Jasper læste bogen, gjorde han ikke det?
Jasper read.PAST book.DEF, do.PAST he NEG *det*
'Jasper read the book, didn't he?'

On the surface, this looks like a counterexample to the claim that DTQs are necessarily derived by VPE: if *det* is a true predicate anaphor (i.e., a VP proform), then the predicate has not been elided. However, careful work on the syntax of this *det* independent of DTQs reveals that it is in fact not a true predicate anaphor, but rather a pronominal sitting just outside a normal predicate ellipsis site: see Bentzen et al. (2013) and Weir (2024) for extensive discussion.[19] In other words, even tag clauses involving *det* are nevertheless derived by VPE, as predicted.

Finally, a novel argument for ellipsis in DTQs – one not considered in Sailor (2009) – can be made from diachrony, namely cases where the historical loss of VPE in a language correlates with the loss of DTQs. For example, according to Roger (2013: 4-5), Middle French allowed DTQs such as those in (34) during a period in which predicate ellipsis was also "widely attested" (examples from the 15$^{th}$-century text *Les Cent Nouvelles Nouvelles)*:

(34) *Middle French DTQs* (Roger 2013: 4)

a. Et maintenant vous me voiez bien, faictes pas?
and now you.PL me see.2PL well do.2PL $NEG_2$
'And now you see me well, don't you?'

b. Vous y estes cy venus pour querir argent et leur delivrance,
you.PL there be.2PL here come.PTCP for seek.INF money and their liberation
n'estes pas?
$NEG_1$.be.2PL $NEG_2$
'You have come here in order to seek money and their liberation, haven't (*lit.:* aren't) you?'

However, in present-day French, neither DTQs nor any variety of predicate ellipsis are possible: both have been lost since the Middle French period. I leave it to future work to determine with more precision when predicate ellipsis and DTQs were each lost in the history of French, but at this point the predictions should be clear. While this correlation alone is insufficient to establish a causal relationship between the two (i.e. the loss of predicate ellipsis entailing the loss of DTQs), it is nevertheless suggestive; and, when taken together with the other evidence in this section (and in Sailor 2009), it points clearly toward predicate ellipsis being a necessary ingredient in the derivation of DTQs. Finally, note that this same general argument can likely also be made from the history of Dutch as well: according to van Craenenbroeck (2010: 274, fn. 4) and references therein, 19$^{th}$-century varieties allowed DTQs and certain relevant kinds of ellipsis, both of which have since been lost and are unavailable in present-day varieties. This coordinated absence follows

[19] Weir (2024) extends this general analysis of Mainland Scandinavian *det* to the *that* found in English and Scots sentences affirming a prior assertion such as *That he can / He can that*; however, as a reviewer points out, this *that* is impossible in a DTQ: *He can't dance, (*that) can he (*that)?*. Importantly, Weir (2024: 29) observes that this *that* is independently ruled out in (polar) interrogatives (unlike *det*), so its unavailability in the tag clauses of DTQs is consistent with the claim that tag clauses are truly interrogative (on which see §4).

straightforwardly if the derivation of DTQs requires predicate ellipsis to be available, such that the loss of the latter in diachrony entails the loss of the former.

Having established that DTQs are derived by ellipsis, we can now ask whether the same holds for ITQs as well.

### 3.2 Ellipsis in invariant tag questions?

To this point we have had relatively little to say about TQs of the invariant type. However, given that ellipsis is an essential component of the derivation of DTQs (§3.1), it is worth asking whether the same is true for the derivation of ITQs as well (a question also raised, but not answered, in Sailor 2009: 74).

In this subsection, I provide a few arguments suggesting that an ellipsis approach to ITQs has merit, though I will not attempt to develop a concrete proposal here. Instead, the general view I advocate is that the apparent 'invariance' of ITQs – i.e., the fact that they exhibit little to no sensitivity to the syntactic features of their host – is illusory:[20] underlyingly, the syntactic features of ITQs do in fact co-vary with those of their hosts, but this is obscured on the surface by ellipsis. In other words, ITQs are underlyingly DTQs of a particular kind, albeit ones that have undergone clausal ellipsis rather than predicate ellipsis (VPE). More generally, I am suggesting that *all* TQs are underlyingly DTQs; the differing surface profiles of ITQs and DTQs is simply the product of eliding constituents of differing sizes.

The previous subsection reviewed and added to Sailor's (2009) arguments that DTQs are derived by VPE, including the claim that the crosslinguistic scarcity of DTQs is an epiphenomenon of the relative scarcity of VPE across languages (Merchant 2001: 3; 2006: 272). By contrast, studies on tag questions have repeatedly noted that ITQs are significantly more common crosslinguistically than DTQs are.[21] This can again be profitably linked to the type of ellipsis involved, as clausal ellipsis is much more common crosslinguistically than predicate ellipsis is (the former being the source of e.g. sluicing and fragment answers, both widely attested). In the remainder of this subsection, I develop arguments that the widespread distribution of ITQs alongside their language-internal properties all follow from their status as phenomena involving clausal ellipsis.

According to Moravcsik (1971: 87) (and see also Ultan 1969: 224, Siemund 2001: 1015, and Wiltschko 2021: 102), a common strategy for building ITQs across languages involves the use of clefts, existentials, and/or expressions meaning 'true/truth', alongside a means of marking interrogative mood (and negation in the case of negative TQs). This correctly characterizes well-known examples of ITQs from languages such as German (35a) and French (35b), as well as those of more than two dozen other languages discussed in Moravcsik (1971: §4.2; see her discussion of 'metatags'). It also correctly characterizes many of the English ITQs we saw in (1), leading Moravcsik to suggest (36) as an underlying source for a simple ITQ such as *right?*:

(35) a. Sie gehen (nicht), nicht wahr?
they go.3PL NEG NEG true
'They (don't) go, right?'

b. Vous (n'-)avez (pas) lu le livre, n'-est-ce pas?
you (NEG$_1$-)have.2PL NEG$_2$ read.PART the book NEG$_1$-be.3SG-it NEG$_2$
'You have(n't) read the book, right?'

(36) You are going, (is(n't) that) right?

That languages tend to draw on a similar set of mechanisms for building their ITQs – and that clefts are among these mechanisms in particular – lends some plausibility to the idea that even ITQs involve ellipsis (and see Holmberg 2016: 185 for an ellipsis derivation of ITQs involving *right*).

[20] This is trivially true to the extent that there are clause-type restrictions on the sorts of host clauses that an ITQ can combine with (assuming such restrictions are in fact syntactic, and not e.g. pragmatic).

[21] Indeed, the earlier literature is rife with claims that DTQs are actually unattested outside of English: see e.g. Lakoff (1972: 919), Hudson (1975: 1) and references therein, Culicover (1992: 1), among others.

The strongest argument can be made on the basis of another common ITQ strategy across languages (again noted by Moravcsik 1971: 87) involving the use of *polar response markers* (henceforth *PRMs*), namely particles such as *yes, no, yeah,* etc. Such particles are normally used to answer polar questions, but languages commonly recruit them to form ITQs as well (see also Wiltschko 2021: §5.2.3 on the lexical sources of 'confirmationals'):

(37) You have(n't) seen that film, yeah?

Outside of TQs, the syntax of PRMs has been a topic of growing interest in the last 15 years, spurred in part by arguments in Kramer and Rawlins (2011) that they are derived from an underlying clausal source. Specifically, they argue that PRMs are pronounced adjacent to an elided clause corresponding roughly to the question soliciting the response furnished by the PRM. This idea receives a book-length treatment in Holmberg (2016), where the results of a large crosslinguistic survey are brought to bear in support of a clausal ellipsis derivation for PRMs (see esp. his ch. 3).

In what follows, I assume that this approach to PRMs is correct, and ask what consequences this has for our understanding of ITQs. The logic is straightforward: if ITQs are commonly built from PRMs, and PRMs are derived by clausal ellipsis (e.g. PolP/TP ellipsis), then such ITQs are also derived by clausal ellipsis. Moreover, if ellipsis is involved in generating one common subtype of ITQs, the prospects of an ellipsis-based analysis deriving all ITQs becomes significantly more attractive.

In the ellipsis literature, one common strategy for showing that something superficially small (e.g. a pronoun, particle, etc.) is in fact part of something large (i.e., a clause) is to show that it exhibits morphosyntactic properties uniquely associated with clause-sized structures. This type of argument can be extended to PRMs, and by extension to PRM-based ITQs as well.[22] For example, in responses to polar questions, certain dialects of Dutch (e.g. in Flemish Brabant) have PRMs which exhibit φ-features indexing the subject of the question, a fact which van Craenenbroeck (2010: ch. 15) takes to motivate a clausal source for these PRMs (Wambeek Dutch examples below from his p. 208):

(38) Q: Kom Marie mergen?
comes Mary tomorrow
'Is Mary coming tomorrow?'

A: Jui-s.
yes-she
'Yes.'

A′: Nieje-s.
no-she
'No.'

Regardless of whether we analyze this as φ-agreement or cliticization, it is clear that these PRMs cannot just be atomic clausal proforms: minimally, they must originate within a structure large enough to host a φ-bundle matching the values of the question's subject (either to serve as the goal for a φ-probe on the PRM, or to undergo incorporation into the PRM). Under simplest assumptions, this φ-bundle is simply the subject of a clause that hosts the PRM in its periphery, and which undergoes PRM-stranding ellipsis.[23] This is fundamentally the same analysis Holmberg (2016) gives for PRMs, only with an additional step of φ-agreement / cliticization in these dialects.

If this ellipsis approach to the syntax of PRMs is on the right track, then we can now establish that at least some ITQs are derived the same way. As we see below in West Flemish, the full paradigm of conjugated

[22] An early antecedent for this sort of argument can be found in Morin (1973) for French ITQs involving the PRMs *oui*, *si*, and *non*.

[23] Based on additional complicating facts not discussed here, van Craenenbroeck (2010: ch. 15) settles on a more complex structure than what I describe above for these examples; however, the core intuition – namely, that the conjugated PRM is realized within a clausal superstructure – remains the same.

PRMs can serve as the tag component of an ITQ (all data from Smessaert 1995: 56):[24]

(39) *West Flemish ITQs with agreeing PRMs*

a. k-è-n-t (goed) èzien, jaa-k?
I-have-AGR-it well see.PTCP, yes-I
'I have seen it (well), right?'

b. m-è-n-t (goed) èzien, jo-m?
we-have-AGR-it well see.PTCP, yes-we
'We have seen it (well), right?'

c. j-è-t-èzien, jo:-je?
you-have-it-see.PTCP, yes-you$_{SG/PL}$
'You$_{SG/PL}$ have seen it, right?'

d. n-è-t-èzien, jo:-n̩?
he-have-it-see.PTCP, yes-he
'He has seen it, right?'

e. z-è-t-èzien, jo:-s?
she-have-it-see.PTCP, yes-she
'She has seen it, right?'

f. t-is-do wére, jo:-t?
it-is-there again, yes-it
'It is there again, right?'

g. z-è-n-t-èzien, jõ:-s?
they-have-AGR-it-see.PTCP, yes.3PL-they
'They have seen it, right?'

h. k-è-n-t nie-(goed) èzien, niŋ-k?
I-have-AGR-it NEG-well see.PTCP, no.1SG-I
'I haven't seen it (well), right?'

i. m-è-n-t nie-(goed) èzien, ni-m?
we-have-AGR-it NEG-well see.PTCP, no-we
'We haven't seen it (well), right?'

j. j-è-t-nie-èzien, ni-je?
you-have-it-NEG-see.PTCP, no-you$_{SG/PL}$
'You$_{SG/PL}$ haven't seen it, right?'

k. n-è-t-nie-èzien, ni:-n̩?
he-have-it-NEG-see.PTCP, no-he
'He hasn't seen it, right?'

l. z-è-t-nie-èzien, ni:-s?
she-have-it-NEG-see.PTCP, no-she
'She hasn't seen it, right?'

m. t-is-do nog nie, nin-t?
it-is-there yet NEG, no-it
'It isn't there yet, right?'

n. z-è-n-t-nie-èzien, nĩ:-s?
they-have-AGR-it-NEG-see.PTCP, no.3PL-they
'They haven't seen it, right?'

The argument is simple: given that these PRMs require a clausal ellipsis analysis (*pace* Haegeman and Weir 2015: §3), it follows that ITQs built from them are derived the same way (absent some overt, acquirable evidence to the contrary).

A similar argument can be made from a type of TQs found in Upper Austrian German, though they differ from the West Flemish examples in an interesting way. As shown in Wiltschko and Heim (2016: 319) and Heim and Wiltschko (2020: 212), Upper Austrian German has TQs whose tag clauses are invariant, except that they exhibit allocutive agreement (i.e., agreement indexing the addressee):

(40) *Allocutive agreement in Upper Austrian German ITQs*

a. Ea hot an neichn Hund, goi?
He has a new dog, CONF.2$_{INFORMAL}$

b. Ea hot an neichn Hund, goi-ns?
He has a new dog, CONF-2$_{FORMAL}$

c. Ea hot an neichn Hund, goi-ts?
He has a new dog, CONF-2PL
'He has a new dog, right?'

These TQs superficially challenge the 'dependent' vs. 'invariant' dichotomy we have been using in yet another way: the shape of such tag clauses is insensitive to the properties of its host (typical of ITQs), but the shapes themselves do differ from context to context (typical of DTQs), specifically according to the speaker-addressee relation. More to the point, though, these examples provide support for the idea that all TQs involve high functional structure of the sort typically found in clauses with rich left peripheries (see Heim and

[24] Note that, according to Smessaert, the first person examples below are degraded for pragmatic reasons (the speaker seems uncertain of their own experience). In his fn. 4, he implies that they improve with modification of the verb by e.g. *goed* 'well', hence its inclusion in the relevant examples here. Regarding the surface alternations exhibited by the PRM bases above (e.g. *jaa* vs. *jo* in (39a)-(39b)), Smessaert (1995: 48) suggests that they are conditioned by (or indeed part of) the various agreement markers. Many thanks to Jeroen van Craenenbroeck for bringing this paper to my attention, and for helpful discussion of the data.

Wiltschko 2020: 213 for discussion and references concerning the syntax of allocutive agreement), which in turn suggests that the absence of lexical material in such TQs must be the result of ellipsis.

## 3.3 Ellipsis in tag questions: Some theoretical consequences

The foregoing discussion of ellipsis in TQs has broader consequences. Before closing this section, let us take stock of these.

### 3.3.1 Rethinking the DTQ vs. ITQ distinction

If the arguments in §3.2 are valid, they warrant a rethinking of the 'dependent' vs. 'invariant' distinction found in every basic description of TQs in the literature. If an ellipsis analysis of the sort described above can be carried over to ITQs, then we move appreciably closer to a common set of ingredients for deriving any and all TQs. The superficially-significant distinction between DTQs and ITQs would then reduce only to minor parametric differences, namely the category of the elided constituent, the type of material that can survive the ellipsis, and so on—all variables that are independently required to account for other ellipsis phenomena.

Concretely, the tendency for ITQs to show little to no sensitivity to their hosts would then simply follow from the size of the elided constituent involved in their derivation. For example, in some language whose (biased) polar interrogatives make relatively limited overt use of projections in and above the CP-layer (e.g. English), eliding a constituent as large as or larger than TP in order to derive a TQ is likely to obliterate almost any material (e.g. subjects, auxiliaries, polarity) that might have identified that TQ as 'dependent' in the first place. In such a language, the distinction between an ITQ and a DTQ would reduce strictly to the size of the ellipsis site involved in each, and thus the amount and type of material that is able to avoid deletion in that language. Such properties vary greatly across languages, however, leaving the 'ITQ' vs. 'DTQ' distinction with little theoretical value: for example, a TQ derived by TPE might surface as an ITQ in one language but a DTQ in another language, owing to syntactic variation entirely independent of each language's TQs (e.g. whether it has allocutive agreement as in (40), or otherwise makes rich use of the clausal periphery). With this in mind, we may continue using 'invariant' and 'dependent' as useful descriptive labels for a given language's TQs, recognizing now that no analytical entailments accompany them.

### 3.3.2 The sizes of ellipsis in TQs and the V-stranding ellipsis debate

What, then, of the *Tag Question Implication* in (25) and the *Tag Question Universal* in (26)? These were both stated exclusively for DTQs, but in light of the conclusions just drawn about ITQs, a broader generalization is now called for.

On the view advocated here, what unites DTQs and ITQs is that they both necessarily involve ellipsis of some category on the clausal spine (i.e., along the clause's main projection line). Formulating the generalization in this way would accommodate (25) as a particular subcase; and, to the extent that it holds, a generalized statement of (26) would follow as a corollary:

(41) Tag questions are derived by ellipsis of some category $\alpha$ on the clausal spine.
*Corollary:* if L allows X-stranding TQs derived by $\alpha$-ellipsis, then L allows X-stranding $\alpha$-ellipsis structures generally.

This captures TQs derived by ellipsis various sizes, ranging from PolP/TP-sized (e.g. English ITQs, but also Kashmiri Aux- and V-stranding DTQs), to VoiceP/$v$P-sized (e.g. English Aux-stranding DTQs), and even just VP/$\sqrt{}$P-sized (e.g. Persian $v$-stranding DTQs with both simplex and complex predicates: Sailor 2012: §4.2.2).[25]

[25] A reviewer asks whether any language has TQs derived by Modal Complement Ellipsis (MCE), a type of ellipsis targeting the complement of certain modals in French, Italian, and Spanish (Dagnac 2010) as well as in Dutch (Aelbrecht 2010: §2.2). Nothing about (41) rules out modal-stranding DTQs derived by MCE, as it targets a spinal category (TP for Dagnac, and AspP for Aelbrecht); however, the languages that are said to have MCE all disallow such TQs, as in Italian (Valentina Colasanti, p.c.):

Note that the corollary in (41) is unidirectional. For a given language, X-stranding TQs entail X-stranding ellipsis of a spinal category in e.g. declaratives; however, the opposite does not necessarily hold: a language that allows X-stranding ellipsis of a spinal category in its declaratives will not necessarily allow the corresponding TQ type. See §3.3.3 for discussion.

Conspicuously excluded from the statement in (41) is the possibility of deriving TQs with argument ellipsis. In particular, what is excluded is a derivation for a V-stranding DTQ in which the verb's internal arguments each undergo ellipsis independent of one another, leaving the clausal spine intact. Based on what is presently known about DTQs crosslinguistically, this appears to be the right result. If such a derivation were available for DTQs, the results of Sailor's (2009) crosslinguistic survey culminating in the universals in (25) and (26) would go unexplained (see §3.1). Moreover, an argument ellipsis analysis for V-stranding DTQs makes the wrong predictions, as Manetta (2021) shows for both Kashmiri and Portuguese. Both languages generally allow internal arguments to be omitted up to recoverability; however, such argument ellipsis is always optional, and ellipsis of one internal argument need not entail ellipsis of the other. Importantly, this optional argument ellipsis process is apparently unavailable in DTQs: retention of either internal argument of a ditransitive is ruled out in the tag clause of a DTQ, even though such retention is an available option in non-tag clauses (examples adapted from Manetta 2021: 16):

(42) *Kashmiri: no argument ellipsis-derived DTQs*

a. Tse d'ut-uth Ram nov phone, d'ut-uth-as n-a:?
you.ERG give.PERF-2SG Ram new phone, give.PERF-2SG-3SG NEG-Q
'You gave Ram a new phone, didn't you?'

b. *Tse d'ut-uth Ram nov phone, d'ut-uth-as n-a: ~~Ram~~ nov phone
you.ERG give.PERF-2SG Ram new phone, give.PERF-2SG-3SG NEG-Q new phone

c. *Tse d'ut-uth Ram nov phone, d'ut-uth-as n-a: Ram ~~nov phone~~
you.ERG give.PERF-2SG Ram new phone, give.PERF-2SG-3SG NEG-Q Ram

(43) *Portuguese: no argument ellipsis-derived DTQs*

a. Nós demos um telefone novo ao João, não demos ~~um telefone novo ao João~~?
We gave.1PL a telephone new to Juan NEG gave.1PL
'We gave a new telephone to Juan, didn't we?'

b. *Nós demos um telefone novo ao João, não demos ~~um telefone novo~~ ao João?
We gave.1PL a telephone new to Juan NEG gave.1PL to Juan

c. *Nós demos um telefone novo ao João, não demos um telefone novo ~~ao João~~?
We gave.1PL a telephone new to Juan NEG gave.1PL a telephone new

If V-stranding DTQs cannot be derived by argument ellipsis, this would have important consequences for a broader discussion currently playing out in the ellipsis literature. Specifically, the generalization in (41) (and/or the DTQ-specific statements in (25) and (26) when taken together) would make tag questions a valuable ellipsis diagnostic, a fact which has – as a reviewer notes – gone underappreciated in the ellipsis literature since it was first proposed in Sailor (2009).

For example, consider the recent debate in the ellipsis literature over the (non)existence of V-stranding VPE: in a series of recent publications, Landau (2018, 2020a,b, 2021, 2023) argues that all putative instances

(i) a. Maria ha potuto vedere Gigi, ma Luca non ha potuto ~~vedere Gigi~~.
Maria has be.able to.see Gigi, but Luca NEG has be.able
'Maria was able to see Gigi, but Luca wasn't able to.'

b. *Maria ha potuto vedere Gigi, non ha potuto ~~vedere Gigi~~?
Maria has be.able to.see Gigi NEG has be.able
*Intended:* 'Maria was able to see Gigi, wasn't she?'

Determining whether MCE-derived DTQs are ruled out *a priori*, or whether these languages simply happen to lack the sufficient conditions for DTQs (on which see §3.3.3), is a matter that must remain for future work.

of the phenomenon involve either (i) multiple argument ellipsis targeting each VP-internal argument individually (as above), or (ii) V-stranding ellipsis of TP/PolP. In building his argument, Landau calls into question the reliability of certain traditional diagnostics taken to support a V-stranding VPE analysis over the alternatives, e.g. the apparent recovery of adjuncts as part of the ellipsis site. While various authors have disputed Landau's claims and/or attempted to rehabilitate some of these diagnostics (Gribanova 2020, Portelance 2020, Ruda 2022, Simpson 2023, among others), the theoretical and empirical status of V-stranding VPE remains very much a live issue. If the generalization in (41) is sound, DTQs would offer a new and potentially dispositive source of evidence in this debate: they could rule out multiple argument ellipsis as a potential source for at least some cases of V-stranding.

Consider the case of Turkish (nucl1301; Turkic; Turkey), a language which allows a V-stranding surface profile to arise whenever a VP's contents have recoverable antecedents in the discourse. Şener and Takahashi (2010) argue that sentences with this profile in Turkish are derived by argument ellipsis, and thus are not true cases of V-stranding VPE; Landau's work adopts this conclusion, citing Turkish as consistent with his claim that true V-stranding VPE does not exist. Against this theoretical backdrop, then, it is perhaps surprising that Turkish in fact allows DTQs (mentioned, but not exemplified, in Moravcsik 1971: 91, fn. 6; data below from Güliz Güneş, p.c.):[26]

(44) *Turkish DTQ*

Ali kitab-ı dikkatli oku-du, oku-ma-dı mı?
Ali book-ACC carefully read-PAST read-NEG-PAST Q
'Ali carefully read the book, didn't he?'

By ruling out multiple argument ellipsis as a potential analysis for (44), the statement in (41) narrows the space of potential analyses considerably, particularly if Landau's claim is correct that true V-stranding VPE does not exist: in that case, the tag clause in (44) could only be derived by ellipsis of TP/PolP. I leave it to future work to determine whether such an analysis is feasible for Turkish.

### 3.3.3 The crosslinguistic distribution of DTQs: necessary vs. sufficient conditions

As DTQs have been the subject of some typological interest over the past several decades, this subsection takes stock of what is presently known about their crosslinguistic distribution, as well as some potential factors contributing to that distribution.

Every crosslinguistic study of DTQs mentions their scarcity, particularly when compared to ITQs. For instance, Axelsson (2011: 835) characterizes DTQs as "quite rare cross-linguistically" after finding evidence of them in only 11 languages, compared to roughly 50 for which she could find evidence of ITQs.[27]

In spite of their apparent rarity, DTQs are nevertheless attested across a range of language families. In the prior crosslinguistic studies of DTQs, evidence is reported from a total of seven families: Moravcsik (1971) provides evidence from Dravidian (Tamil), Indo-European (English), and Kiwaian (unknown; see Axelsson 2011: 830); Sailor (2009) finds further evidence from Sino-Tibetan (Taiwanese) and Austronesian (Samoan); to these, Axelsson (2011) adds Uralic (Finnish), and Sailor (2012) adds Afro-Asiatic (Lebanese Arabic).

In this chapter, we have already seen evidence of DTQs in two additional families: Atlantic-Congo (Bokyi; see (7)) and Turkic (Turkish; see (44)). To these, we may now add a further two language families. The first

[26] Another language that has played an outsized role in the V-stranding ellipsis debate is Japanese (nucl1643; Japonic; Japan). Unlike Turkish, however, Japanese lacks DTQs (Tomoko Ishizuka, p.c.), a fact which is not informative for the V-stranding debate: because the corollary in (41) is strictly unidirectional (if DTQs, then ellipsis of a spinal XP), we cannot conclude anything about the status of V-stranding ellipsis in a language L from the absence of DTQs in L. See §3.3.3 for discussion of the necessary vs. sufficient conditions regulating the crosslinguistic distribution of TQs.

[27] Axelsson's sample is based entirely on published grammars, and she is careful to note that "[t]he fact that a descriptive grammar of a certain language does not mention [DTQs] is of course no guarantee that there is no such construction in that language" (Axelsson 2011: 802). Even permitting some variance for omissions on the part of these grammars' authors, though, the heavily imbalanced distribution of DTQs vs. ITQs in her study is telling.

is Nakh-Daghestanian (or 'Northeast Caucasian'), as DTQs are found in at least Sanzhi Dargwa (sanz1248; Nakh-Daghestanian; Russia):

(45) *Sanzhi Dargwa* (Forker 2020: 548)
tolko hel s:urrat ħaˁsible b-aχ-ij a-w-irχʷ-ar,
only that picture following NEUT.SG-know.PERF-INF NEG-M.SG-be.able.IMPF-PRES
w-irχʷ-an-ne=w?
M.SG-be.able.IMPF-PTCP-FUT.3=Q
'Only by means of the picture one cannot know, can one?'

The second is Surmic, with evidence coming from Mursi (murs1242; Surmic; Ethiopia), whose DTQs exhibit an interesting pattern. According to Worku (2021: §12.4, §13.3), the tag clauses of Mursi DTQs all involve a copula rather than a lexical verb, regardless of the host clause's predicate type. These are clearly not ITQs, however: the tag clause's copula inflects for the φ-features of the host clause's subject, and, in cases where the host clause predicate involves a lexical verb (as in (46b), where *éŋér-* 'afraid' is a verbal stem despite its gloss/translation), the tag clause can also include an overt pronominal subject coreferential with the host's subject (see Worku 2021: §13.3 for discussion):

(46) *Mursi* (Worku 2021: 511, 532)
a. àŋè k-án-í támárí, ŋà=k-án-í=ó
1SG 1SU-COP.IMPF-1SG.SU.IMPF student NEG.IMPF=1SU-COP.IMPF-1SG.SU.IMPF=NEG
'I am a student, aren't I?'
b. jɔ̀g àggì=nù éŋér-é=ŋà, jɔ̀g ŋà=ʔán=ó?
3PL 3PL.PN.SP=DIST afraid-3PL.SU.IMPF=DEF 3PL NEG.IMPF=COP.3.IMPF=NEG
'They were afraid, weren't they?'

It is unclear whether the tag clause in Mursi DTQs such as (46b) could be analyzed as involving a cleft; if so, a parallel could be drawn to English cleft-based tags in (23). I leave this matter open.

The table in (47) summarizes the above discussion, listing all 11 language families for which I am currently aware of convincing evidence for DTQs.[28] For each family, I provide a non-exhaustive list of the languages for which evidence of DTQs is available, alongside sources where the relevant evidence can be found (and/or where the primary sources for such evidence are cited):

[28] According to Matić (2016), the Tompo dialect of Even (even1260; Tungusic; Russia) exhibits a pair of phenomena – what he calls *epistemic tags* and *uncontroversial tags* – which at first glance look very much like Aux-stranding DTQs. However, based on Matić's careful discussion of both phenomena, we can conclude that neither qualifies as a tag question as defined in (5) (though Matić 2016: §6 speculates that epistemic tags in Even developed from an earlier stage of the language in which true DTQs were possible). In brief, although epistemic tags express the speaker's uncertainty about the proposition asserted in the host clause, such sentences do not constitute questions; thus, they fall short of the criteria in (5a,d). This is also true for uncontroversial tags, but Matić (2016) further shows that they lack independent clausal status and are not interrogative (e.g. in their distribution, but also by being incompatible with all typical Q-marking strategies in the language); rather, they behave more like an ornate focus-marking strategy within a monoclausal structure. As such, I have omitted Even (and thus Tungusic) from the table in (47). If any other language families are missing from this table, it is simply due to ignorance on my part, rather than a principled omission.

(47) *Language families in which DTQs are attested*

| **Language family** | **Language(s) (selected)** | **Source(s) (selected)** |
|---|---|---|
| Atlantic-Congo | Bokyi | See (7) |
| Afro-Asiatic | Lebanese Arabic | Sailor (2012) |
| Austronesian[29] | Samoan | Sailor (2009) |
| Dravidian | Malayalam<br>Tamil | Moravcsik (1971), Axelsson (2011) |
| Indo-European | English<br>Danish<br>Norwegian<br>Celtic subfamily<br>Portuguese<br>Persian<br>Kashmiri | Moravcsik (1971), Sailor (2009), Axelsson (2011) |
| Kiwaian | [unknown] | Moravcsik (1971: 91); see also Axelsson (2011: 830) |
| Nakh-Daghestanian | Sanzhi Dargwa | See (45) |
| Sino-Tibetan | Taiwanese<br>Kuki-Chin subfamily<br>Meithei | Sailor (2009), Axelsson (2011), see §4 |
| Surmic | Mursi | See (46) |
| Turkic | Turkish | See (44) |
| Uralic | Finnish | Axelsson (2011) |

I harbor no illusions that this list of language families exhausts the actual set in which DTQs are possible among the world's languages; presumably the list will grow as more descriptive work specifically targeting DTQs becomes available. Moreover, it follows from the generalization in (41) that for each of the languages discussed above, (i) that language's DTQs are derived by ellipsis of a spinal category, and (ii) that language should allow ellipsis of the same category in non-tag clauses. Testing these predictions is an important task if (41) is to be maintained, but one I must leave for future work (but again see Sailor 2009, 2012 for confirmation of these predictions for at least Lebanese Arabic, Danish, Norwegian, Scottish Gaelic, Portuguese, Persian, and Taiwanese).

Regarding the crosslinguistic distribution of ITQs among the above languages, Axelsson (2011) reports that Malayalam, Welsh, and Scottish Gaelic all lack an ITQ strategy despite allowing DTQs (see §3.3.4 on the implicational generalizations that hold for and among TQs).

The question then arises whether TQs of one sort or another are universal, or whether certain languages might lack them entirely. In her crosslinguistic study of TQs, Axelsson (2011: 839, fn. 11) finds three languages described as lacking tag questions of any sort according to the available sources, namely Abkhaz (abkh1244; Abkhaz-Adyge; Georgia, Russia, Turkey), Tariana (tari1256; Arawakan; Colombia, Brazil), and Hixkaryána (hixk1239; Cariban; Brazil). To these we can add Bardi (bard1255; Nyulnyulan; Australia), which "does not have tag questions" according to Bowern (2012: 617). However, without knowing exactly what each author meant by 'tag questions' in their grammatical description – DTQs? ITQs? Both? – it is

[29] See Vander Klok (2017) for the claim that DTQs may also be found in Javanese (though additional work may be needed to rule out an alternative question analysis for the cases she discusses; see fn. 2).

hard to fully evaluate these claims. As we now know, it is not surprising if a language lacks DTQs, but lacking ITQs as well is perhaps more noteworthy from a typological perspective. (See also Hölzl 2018: 69 for some discussion.)

Given all of the above discussion concerning the crosslinguistic distribution of TQs, one final pair of questions presents itself: (i) what are the necessary conditions for a language to exhibit TQs of a given type, and (ii) what are the sufficient conditions? We can go some way toward answering (i), but the answer to (ii) is, to my knowledge, completely unknown.

Concerning (i): to the extent that the statement in (41) is valid, then ellipsis of a spinal category is a necessary condition for a language to have TQs (see §3.1). If a language allows only argument ellipsis, or no ellipsis at all, then we predict it not to allow TQs either. More specifically, we predict no language to have DTQs unless it also allows ellipsis of the same-sized constituent (with roughly the same set of ellipsis-external material surviving) in non-tag clauses. Recall from §3.1 and §3.3.1 that the apparent rarity of *v*P/VP-ellipsis crosslinguistically therefore has some explanatory power in accounting for the constrained distribution of DTQs crosslinguistically, especially compared to ITQs.

At the same time – and now concerning question (ii) – we also know that there are languages that freely allow ellipsis of a particular spinal category which nevertheless lack TQs of a corresponding shape. In other words, a language allowing ellipsis of a given category does not guarantee well-formed TQs involving ellipsis of that same category. For instance, as discussed in fn. 25, Dutch, French, Spanish, and Italian all allow Modal Complement Ellipsis, and yet none of these languages exhibits DTQs built from that ellipsis type (or indeed any other; they all lack any kind of *v*P/VP ellipsis, and only allow ITQs derived by clausal ellipsis). The same point may also be made with Hebrew: although Landau (2018, *inter alia*) argues at length that Hebrew lacks V-stranding VPE, he claims that it does in fact allow Aux-stranding VPE in examples of the following sort:

(48) *Hebrew Aux-stranding VPE* (Landau 2018: 25)

A: ze haya yaxol likrot, ata yode'a.
it was can to.happen you know
'It could have happened, you know.'

B: lo, ze LO haya ~~yaxol likrot~~.
no it not was
'No, it couldn't have (happened).'

Nevertheless, such elliptical sentences cannot form the basis for the tag clause of a DTQ in Hebrew (49),[30] even though the corresponding non-tag confirmation question in (50B) is well-formed (if nonstandard; Itamar Kastner, p.c.):

(49) *No Aux-stranding DTQs in Hebrew*

a. *ze haya yaxol likrot, ze lo haya ~~yaxol likrot~~?
it was can to.happen it not was
*Intended:* 'It could have happened, couldn't it?'

[30] For completeness, Hebrew similarly disallows V-stranding DTQs:

(i) a. *Gil hizmin et axot-o, hu lo hizmin
Gil invited ACC sister-his he not invited
*Intended:* 'Gil invited his sister, didn't he?'

b. *Gil lo hizmin et axot-o, hu hizmin
Gil not invited ACC sister-his he invited
*Intended:* 'Gil didn't invite his sister, did he?'

If Landau (2018) is correct that sentences with the V-stranding surface profile in Hebrew are exclusively derived by (multiple) argument ellipsis rather than ellipsis of a spinal category, then the absence of DTQs in the language is consistent with the conclusion in §3.3.2 that DTQs cannot be derived by argument ellipsis, and thus follows straightforwardly from (41).

b. *ze lo haya yaxol likrot, ze haya ~~yaxol likrot~~?
it not was can to.happen it was
*Intended:* 'It couldn't have happened, could it?'

(50) *Aux-stranding confirmation question in Hebrew*

A: ze lo haya yaxol likrot.
it not was can to.happen
'It couldn't have happened.'

B: ze LO haya ~~yaxol likrot~~?
it not was
'It couldn't have?'

The acceptability of the elliptical confirmation question in (50B) – identical in both form and function to the unacceptable tag clause in (49a) – shows that something else is responsible for the ill-formedness of these DTQs in Hebrew: some sufficient condition has not been met, even though at least one necessary condition (ellipsis of a spinal category in a polar question) has been.

Stepping back, precisely what the (set of) sufficient condition(s) is for a language to allow DTQs remains unknown, as it does not obviously correlate with any other formal property (but see the next subsection). At the same time, it must also be noted that we do not know the sufficient conditions for a language to allow ellipsis of a particular category either, so any progress we make on the *ellipsis licensing* question will have clear consequences for this *TQ licensing* question. (For some additional discussion of the necessary vs. sufficient conditions for DTQs, see Sailor 2009: 75 and especially Sailor 2012: §5.)

Finally, one hopes that whatever general explanation we can eventually provide for the absence of DTQs in Hebrew, Dutch, French, Spanish, Italian, and so on will similarly extend to the absence of (I)TQs in Malayalam, Welsh, Scottish Gaelic, Abkhaz, Tariana, Hixkaryána, and Bardi; however, a great deal more work will be needed before the matter can be settled.

### 3.3.4 Implicational universals for tag questions

The preceding discussion in this section offered a partial theory of why some languages have DTQs while others do not, based on the relative scarcity of one of the crucial ingredients involved, namely predicate ellipsis (now understood as ellipsis of a small enough constituent to allow 'dependent' material to survive). We are now in a position to revisit the implicational universals stated for TQs in Moravcsik (1971) and Axelsson (2011), given in (51) and summarized in the implicational hierarchy in (52):

(51) *Tag questions: implicational universals* (to be revised; adapted from Axelsson 2011: §6)

For a language L,

a. If L allows positive DTQs, then it allows negative DTQs.
b. If L allows DTQs, then it likely allows ITQs.
c. If DTQs in L are sensitive to their host clause's person/number features, then they are also sensitive to their host's tense features.
d. If DTQs in L are sensitive to their host clause's gender features, then they are also sensitive to their host's person/number features on the one hand, and tense features on the other.
e. If DTQs in L are sensitive to their host clause's tense features, then they are also sensitive to their host's polarity (leading to either same-polarity or reverse-polarity tags).
f. If DTQs in L can involve *do*-support, then they are sensitive to their host's gender, person/number, tense, and polarity features.
g. If DTQs in L can involve *do*-support, then they either require or allow overt subjects.

(52) *Implicational hierarchy of tag-host dependencies* (adapted from Axelsson 2011: 833)

polarity < tense < person/number < gender < *do*-support < overt subject possible

If Sailor (2009, 2010, 2012, 2014) is correct that DTQs are simply (biased) polar interrogatives reduced by an independently-available ellipsis operation in the languages that have them, then (51c-g) follow straightforwardly from the syntax of these languages, and thus need not be stated as separate implications. For example, if DTQs in a language L involve Aux- or V-stranding VPE, and (main/auxiliary) verbs in L normally exhibit φ-agreement with their subjects in polar interrogatives, then it follows that the (main/auxiliary) verbs in L's DTQs will also exhibit such agreement, all else being equal.

The other implicational statements in (51c-g) simply follow from what we already know about the syntax of natural languages—specifically, the layering of functional categories comprising the inflectional domain. For instance, the syntactic locus of polarity (e.g. sentential negation), finiteness, tense, subject φ-agreement, and canonical subjects all tend to cluster together (Pollock 1989 and much subsequent work); it is therefore unsurprising that a (biased polar interrogative) clause, having undergone ellipsis of the sort that characterizes DTQs, will consist of whatever higher functional structure is left behind ("stranded") by this ellipsis. The pairwise implicational statements among the categories in (51c-g) simply reflect the (near-)universal dominance/containment relations among those categories' functional projections, such that e.g. the presence of subject φ-agreement entails the presence of tense marking (again recalling Pollock's functional hierarchy in which e.g. TP dominates AgrP). With this, nothing more needs to be said to account for the implications in (51c-g) from Axelsson (2011: §6)—in particular, nothing *tag-specific* needs to be said (but see §4.1 below for a caveat).

As such, we can restate the set of implicational universals from (51) as follows, preserving only the first two from Moravcsik (1971) and unifying the others under the corollary stated above in (41):

(53) *Tag questions: implicational universals* (final)

For a language L,

a. If L allows positive DTQs, then it allows negative DTQs.
b. If L allows DTQs, then it likely allows ITQs.
c. If L allows X-stranding TQs derived by α-ellipsis, then L allows X-stranding α-ellipsis structures generally.

Thus, many of the descriptive generalizations from Axelsson (2011) can be shown to follow from more general syntactic properties of the pieces involved in the derivation of TQs.

### 3.4 Summary

Recall the analytical intuition about TQs going back to at least Huddleston (1970): that they are derived by (i) ellipsis, operating on (ii) a full polar interrogative clause. This section has focused exclusively on the ellipsis component of this intuition in (i), reviewing arguments not just for an ellipsis-based account of DTQs, but also for ITQs. Several important theoretical consequences followed from this ellipsis-based account of TQs, primarily concerning their crosslinguistic profile and distribution; these were discussed in §3.3.

However, to this point I have said nothing at all about the interrogative component of Huddleston's (1970) intuition in (ii). In what remains of this chapter, we largely leave questions of ellipsis behind in order to examine the clause type of tag clauses, with particular focus on their morphosyntactic properties.

## 4 Tag questions are interrogative: Question-marking strategies in tag clauses

Pre-theoretically, all TQs involve some means of soliciting a response from the addressee, and the type of response sought is an expression of polarity and/or agreement (with the speaker's expectation for one particular response playing out as *bias*: see §2.3). Thus, minimally, all TQs involve a means of marking the

clause as a polar interrogative, typically drawn from the language's regular strategies for marking (biased) polar questions (e.g. intonation and/or inversion in English). To the extent that TQs are incompatible with interrogative hosts (see discussion around (10) above), clause type is the only category that consistently differs between a tag clause and its host.

Recalling the definition of tag questions provided in §2.1, and in particular the first part of (5d),[31] this section focuses on the interrogative status of tag clauses. The bulk of the discussion is given over to demonstrating that tag clauses in TQs are genuinely interrogative by looking at various Q(uestion)-marking strategies that arise within them. (For an overview of crosslinguistic Q-marking strategies involving particles, see Walkden this volume and references therein.) To focus the discussion, I present a novel case study from Northwestern Kuki-Chin, a group of understudied Sino-Tibetan languages in which DTQs are widely attested. As we will see, even these closely-related languages exhibit a striking array of Q-marking strategies arising within tag clauses, including some strategies which do not seem to arise in non-tag interrogatives. After reviewing the data, I present the main patterns as a microtypology. This section concludes by considering the consequences of tag-specific morphology for the general theory of TQs endorsed in this chapter.

## 4.1 Q-marking strategies in the tag clauses of Northwestern Kuki-Chin

Northwestern Kuki-Chin (or 'Old Kuki'; oldk1252) refers to a group of non-Sinitic Sino-Tibetan (or 'Tibeto-Burman') languages spoken in the borderlands of northeast India and western Myanmar. Of the 40 or so languages that make up the Kuki-Chin branch (also known as South-Central), the Northwestern group includes at least 19 languages (Konnerth 2022: §1.1). As Hill (2021: §7.5) and others have noted, Northwestern Kuki-Chin is significantly understudied; as such, descriptive materials are presently available for only around half of these languages. Nevertheless, there is evidence that at least seven of these languages allow DTQs. Although DTQs are attested elsewhere in both the Sinitic and non-Sinitic Sino-Tibetan languages,[32] the Northwestern Kuki-Chin group seem to represent a clear 'hotspot' for DTQs. This is striking, given that DTQs are traditionally thought to be a crosslinguistically rare phenomenon. Moreover, DTQs in these languages are subject to interesting microvariation, especially concerning the morphosyntactic marking of clause type within the tag clause.

To give a fuller picture of where DTQs fit within the spectrum of (non)canonical polar questions, below I survey some of the Q-marking strategies found within the tag clauses of Northwestern Kuki-Chin DTQs.[33] Though we will review only the most relevant subset of the rich DTQ patterns exhibited by these languages here (see Sailor in progress for details), it will be sufficient to allow us to draw conclusions about the clause type of tag clauses in DTQs.

### 4.1.1 Q-particles: Chothe (etc.)

Roughly all the Northwestern Kuki-Chin languages can or must use a clause-final Q-particle to form a polar interrogative. Perhaps unsurprisingly, then, the most common pattern of Q-marking in the tag clauses of

[31] Regarding (5d), this aspect of the definition in particular plays a crucial role in distinguishing Q(uestion)-particles (e.g. Mandarin Chinese *ma*) – which are interrogative mood/force markers forming canonical questions, and thus do not distribute like clauses themselves – from tag clauses proper, which often include such Q-particles. A further distinguishing property between the two that holds across languages, first noted in Ultan (1969: §4), is that tag questions are always clause-final (except when construed parenthetically), whereas Q-particles have a range of attested positions (see Siemund 2001: §4.3 and Dryer 2013b). For additional ways of distinguishing tag clauses from Q-particles and other similar-looking phenomena (e.g. reduced A-not-A questions), see Hsiao and Her (2021) and references therein.

[32] Importantly, DTQs are also found in Meithei (mani1292, also known as 'Meitheilon' and 'Manipuri': Singh 1996, Chelliah 1997: 144, Axelsson 2011: §5.10), which is the most widely-spoken Sino-Tibetan language in India with approximately 1.8 million native speakers. It is one of the official languages of the state of Manipur, and is a lingua franca across the state. Importantly, this means that many or all speakers of the Kuki-Chin languages discussed in this section are also speakers of Meithei, thus presenting a possible contact scenario for the shared tag question strategies in this region. See Sailor (in progress) for discussion.

[33] The data reported in this section come exclusively from the limited published sources available for these languages. At times I have had to make adjustments to the glosses and/or translations given in the original source. In all cases, these adjustments were made in the interest of maintaining internal consistency and coherence with other parts of these sources, and do not represent any significant departure from what I take to be the authors' original analyses of the data.

their DTQs involves these same Q-particles. I exemplify this below from Chothe (chot1239), but others in this group making use of this strategy include Aimol, Korbong, Hmar, and Zou.

According to Singh (2000: §6.3.4), tag clauses in Chothe DTQs resemble (reduced) polar questions in the language, making use of the typical polar question marker *-mo* 'Q' and, where relevant, the standard negative marker *-no* 'NEG'. Compare the polar questions in (54) to the DTQs in (55):[34]

(54) *Chothe declaratives and polar questions* (Singh 2000: 110,224)

a. kəy-nə əmo-tə liŋləy-ye
I-NOM him-ACC love-COP
'I love him.'

b. nəŋ əmo-tə liŋləy-mo
you him-ACC love-Q
'Do you love him?'

c. nəŋ əmo-tə liŋləy-no-mo
you him-ACC love-NEG-Q
'Don't you love him?'

(55) *Chothe reverse-polarity DTQs* (Singh 2000: 246)

a. əmo iskul tʰiŋ-ŋe, tʰiŋ-no-mo
he school go-COP go-NEG-Q
'He goes to school, doesn't he?'

b. əmo ju in-no-we, in-mo
he liquor drink-NEG-COP drink-Q
'He doesn't drink liquor, does he?'

Thus, tag clauses are marked with *-mo* 'Q' the same way as typical (biased) polar questions in this and several other languages in this group.

### 4.1.2 Intonation (only): Anal

In some Northwestern Kuki-Chin languages, Q-marking in polar questions can be expressed by intonation alone, rather than with a Q-particle. For at least one such language, Anal (anal1239), rising intonation (indicated below with '↗') is reportedly the only strategy for marking both affirmative and negative (realis) polar questions (Devi 2015: §7.1.3.4; §7.7.1):[35]

(56) *Anal declaratives and polar interrogatives*

a. əma bu ʊə-ča-si
s/he rice 3SG-eat-SIM
'S/he eats rice.'

b. əma bu ʊə-ča-si ↗
s/he rice 3SG-eat-SIM
'Does s/he eat rice?'

c. əma bu ʊə-ča-mə-ʊa ↗
s/he rice 3SG-eat-NEG-COP
'Doesn't s/he eat rice?'

According to Devi (2015: §7.7.4), the tag clauses of DTQs in Anal are exclusively formed by rising intonation, making it an outlier among the other languages in this group (though see discussion of Moyon below):

[34] Singh (2000: §6.3.4) shows that Chothe allows NEG-NEG DTQs, and allows DTQs with (at least) imperative hosts.

[35] Anal has two main negative markers, *-mə* and *-mi*. Descriptively, in declaratives, *-mə* is used for verbal predicates bearing first- or second-person subject agreement, while *-mi* arises with verbal predicates bearing third-person subject agreement. Interestingly, in interrogative clauses, only *-mə* is used. See Devi (2015: §7.8.1).

(57) *Anal reverse-polarity DTQs*

a. əma bu ʊə-ča-si, ʊə-ča-mə-ʊa ↗
s/he rice 3SG-eat-SIM 3SG-eat-NEG-COP
'S/he eats rice, doesn't she?'

b. əma bu ča-mi, ʊə-ča-ʊa ↗
s/he rice eat-NEG 3SG-eat-COP
'S/he doesn't eat rice, does she?'

Thus, for its DTQs, Anal recruits a means of Q-marking found in its normal polar questions; in this respect, it is like the languages above in §4.1.1. However, it is the means by which its polar questions and DTQs are marked – with intonation alone – that makes this language stand out within the Northwestern Kuki-Chin group. (Typologically, the use of intonation alone for Q-marking in both polar questions and the tag clauses of DTQs is not unusual; see e.g. discussion of Portuguese and Persian in Sailor 2009.)

### 4.1.3 TAG.Q: Moyon

Like Anal, Moyon (moyo1238) has an intonation-only Q-marking strategy for its normal polar questions; however, it also has a particle strategy as well. Specifically, Kongkham (2010: §4.4.2.1) reports that Moyon has two different Q-particles for marking polar questions: *-e* and *-wa*/*-mo*:[36]

(58) *Moyon declaratives and affirmative polar interrogatives* (Kongkham 2010: 161,216,233)

a. əma kə-in-a tʰeŋ-na
s/he my-house-LOC come-SIM
'S/he comes to my house.'

b. əma i-tʰeŋ-e
s/he NMLZ-come-Q
'Did s/he come?'

c. nəŋ enlam nə-bor-e
you dance 2SG-look-Q
'Have you watched the dance?'

d. əma i-si-mo
s/he NMLZ-go-Q
'Does s/he go?'

e. nepəŋ i-cəp-wa
child NMLZ-cry-Q
'Is the child crying?'

Similar to the languages described in §4.1.1, negative polar interrogatives in Moyon are formed with the typical negative marker *-maʔ* arising between the verb stem and the Q-particle (Kongkham 2010: 233):

(59) əma i-si-maʔ-wa
s/he NMLZ-go-NEG-Q
'Doesn't s/he go?'

We are now in a position to consider DTQs in Moyon. Based on the preceding examples, they exhibit an unexpected pattern: they are not marked with any of the Q-particles used in typical (affirmative or negative) polar questions; rather, they require a special marker, *-kʰəŋ* (Kongkham 2010: 221). To emphasize that it only arises in the tag clauses of DTQs, I gloss this marker as 'TAG.Q' (see below for additional discussion):

[36] Kongkham (2010: 215) considers these particles to be related allomorphs, proposing that *-e* attaches only to verbal predicates, whereas *-wa*/*-mo* attach to nonverbal (including nominalized) predicates; however, this seems to be contradicted by the data. Since none of these particles arises in DTQs, I leave the details of their distribution aside.

(60) *Moyon reverse-polarity DTQs*

a. əma ə-pa-na, pa-maʔ-kʰəŋ
s/he 3SG-read-SIM read-NEG-TAG.Q
'S/he reads, doesn't s/he?'

b. əma pa-maʔ, pa-kʰəŋ
s/he read-NEG, read-TAG.Q
'S/he doesn't read, does s/he?'

In sum, Moyon appears to have a unique Q-marking strategy for its DTQs' tag clauses. We return to the relevance of this finding shortly.

#### 4.1.4 TAG + Q: Tarao

In Tarao (tara1313), polar questions (and wh-questions) are marked with a predicate suffix *-me* 'Q' (Singh 2002: §7.4):

(61) *Tarao affirmative declaratives and polar interrogatives*

a. əma bu ə-sak
he rice 3-eat
'He eats rice.'

b. nəŋ bu sak ni-pəy-me
you rice eat 2-have-Q
'Have you eaten rice?'

c. əma-i dəktər
he-COP doctor
'He is a doctor.'

d. əma-i dəktər-me
he-COP doctor-Q
'Is he a doctor?'

The negative marker in Tarao is a predicate suffix *-no*, typically followed either by a nonfuture marker *-əŋ* or the future marker *-tu(ŋ)*.

(62) *Tarao negative declaratives*

a. kəy bu ki-sak
I rice 1-eat
'I eat rice.'

b. kəy bu sak-no-əŋ
I rice eat-NEG-NFUT
'I do not eat rice.'

Unfortunately, the available description of Tarao (Singh 2002) does not include any examples of simple negative polar questions, but it is implied that they are formed as we might expect on the basis of the patterns so far; i.e., with *-no* 'NEG' preceding *-me* 'Q' in the verbal complex.

The strategy for forming DTQs in Tarao[37] differs from the other languages discussed in this section, however. In addition to the normal *-me* 'Q' suffix for polar questions, DTQs in Tarao also involve a tag-specific marker *-rəy* 'TAG' preceding Q in the verbal complex (Singh 2002: 91,104):

[37] Singh (2002: §7.4.4) notes that only reverse-polarity DTQs are possible in Tarao, and that the language allows DTQs with imperative hosts.

(63) *Tarao reverse-polarity DTQs*

a. əma bu sa-no, sa-rəy-me
he rice eat-NEG eat-TAG-Q
'He doesn't eat rice, does he?'

b. əma tək ə-sak, sa-no-rəy-me
he meat 3-eat eat-NEG-TAG-Q
'He eats meat, doesn't he?'

c. nəŋ taraw ce, ce-no-rəy-me
you Tarao 2.COP 2.COP-NEG-TAG-Q
'You are Tarao, aren't you?'

d. nəŋ taraw ce-no, ce-rəy-me
you Tarao 2.COP-NEG 2.COP-TAG-Q
'You aren't Tarao, are you?'

Although *-rəy* appears to be a tag-specific morpheme of some kind,[38] its co-occurrence with *-me* 'Q' in DTQs shows that it is not a Q-particle of the sort we saw in Moyon, namely *-kʰəŋ* 'TAG.Q'. As such, I tentatively conclude that *-kʰəŋ* 'TAG.Q' in Moyon is a portmanteau morpheme, whereas with Tarao *-rəy-me* 'TAG-Q' these categories are realized with discrete exponents. The overall conclusion is that we have yet further evidence for tag-specific morphology within this group of languages.

## 4.2 Taking stock: A microtypology of Q-marking in Kuki-Chin DTQs

Taking stock of these patterns, this closely-related group of languages displays two important properties which, to my knowledge, have not been previously noted. On the one hand, despite being a crosslinguistically rare phenomenon, there is evidence of DTQs in nearly every language in the Northwest Kuki-Chin group for which documentation is readily available. On the other hand, there is remarkable variation in the Q-marking strategies these languages employ for the tag clauses of their DTQs: some mark them like normal polar questions, while others use special tag-specific morphology (itself another point of variation).

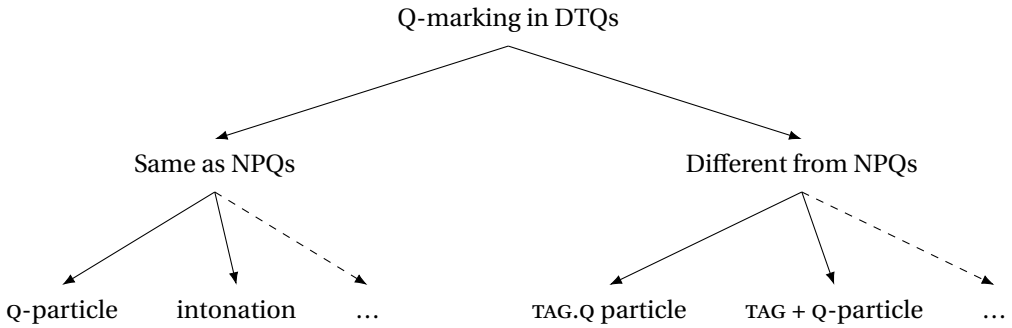
To summarize, I present in (64) below a taxonomy of Q-marking strategies within the tag clauses of DTQs discussed in this section. A basic organizing question is whether Q-marking in a given language's DTQs is the same as how *neutral polar questions* 'NPQs' are marked in that language.[39] Of course, given that TQs are often biased questions, and given that biased questions are occasionally (but not universally) marked in a different way than neutral polar questions, this taxonomy is perhaps not as informative as it could be. Ideally, for each Q-marking strategy observed in some language's DTQs, we would check whether that language allows a corresponding non-TQ polar interrogative using that same Q-marking strategy (e.g. for questions with the same bias profile as its TQs). I have indicated wherever this information was available in the sources consulted for this taxonomy, but in several cases this task must remain for future research.

Below, a dashed arrow indicates a set of strategies which are possible in principle (e.g. tag-specific intonation), but not found in the small sample described here.

[38] This marker is homophonous with 3PL subject agreement in jussive-like clauses (Singh 2002: 98), but this is presumably accidental. This aside, I could find no instances of *-rəy* outside of DTQs (and never in the absence of *-me* 'Q' in such DTQs). Given the well-known epistemic properties that tags have (see Mithun 2012 and references therein), it is possible that *-rəy* 'TAG' is somehow related to the modal auxiliary *əya* 'may' in the language (see Singh 2002: §3.3); however, much more data would be required to investigate this.

[39] Of the 955 languages in Dryer's (2013a) sample, ≈61% mark their polar questions with a Q-particle, and ≈18% use only intonation. Of the remaining ≈20%, special verb morphology is the next most common means of marking polar questions, though other strategies (e.g. changes in word order, such as inversion in Germanic) are attested as well. See Dryer (2013a) for discussion.

(64) *Q-marking strategies in the tag clauses of Kuki-Chin DTQs*




In the next subsection, we consider some theoretical consequences posed by the existence of tag-specific morphology such as that seen in Moyon and Tarao above, and North Walian just below.

### 4.3 Tag-specific morphology and the clause type of tag questions

The very existence of tag-specific marking in DTQs is noteworthy, and I am only aware of one other case reported in the literature.[40] As discussed extensively in Rottet and Sprouse (2008), a particular variety of North Walian (specifically the variety Rottet and Sprouse 2008: §5 refer to as 'Stage 5a') has innovated a particle, *yn*,[41] which shows up only in TQs, regardless of the polarity of the host or tag clause (see also Borsley and Jones 2005: §3.4 and Axelsson 2011: §5.1):

(65) *Tag-specific morphology in North Walian* (adapted from Rottet and Sprouse 2008: (25b) and (35b))

a. Byddwn ni 'n cytuno, yn byddwn?
be.1PL.AFF.FUT we PRT agree TAG be.1PL.INT.FUT
'We will agree, won't we?'

b. Fyddwn ni ddim yn cytuno, yn na fyddwn?
be.1PL.NEG.FUT we NEG PRT agree TAG NEG be.1PL.INT.FUT
'We won't agree, will we?'

Interestingly, this same particle also arises in verbless tag clauses, which appears to be an ITQ strategy in North Walian (Rottet and Sprouse 2008: 46):

(66) Ia, wel, nid chi sydd i ddeud chwaith, yn nace?
yes well NEG you be.3SG.REL to say either TAG NEG
'Yes, well, you're not the one to say, either, are you?'

[40] In contrast, tag-specific morphology in ITQs seems to be relatively common. For example, Konnerth (2014: §15.1.1.7) describes Hills Karbi (karb1241; Sino-Tibetan; India) as having a particle *dī* 'TAG.Q' that appears only when it functions as an ITQ:

(i) lasón-lók-lò, dī?
that.way-only-RL TAG.Q
'Like that it's always been, right?'

Indeed, this is how the invariant particle *innit* can be characterized for certain dialects of English: for detailed discussion (including the diachrony of its grammaticalization), see Childs (2021) and references therein. Other languages reported to have tag-specific morphology for their ITQs include Huehuetla Tepehua (hueh1236; Totonacan; Mexico: Smythe Kung 2007: §8.3.4), Tuvaluan (tuva1244; Austronesian; Tuvalu: Besnier 2000: §1.1.1.2.1.2), and Warrongo (waru1264; Pama-Nyungan; Australia: Tsunoda 2011: §321), among many others.

[41] According to Rottet and Sprouse (2008: 44), North Walian has several other particles that are both homophonous and homographic with *yn* 'TAG', such as the *yn* 'PRT' seen in the host clause of (65b). The authors imply that these other *yn* particles (which include an adverbializer, a resultative marker, and what appears to be a preposition) are distinct from what I am glossing here as 'TAG', so I leave them aside. Also note that DTQs in North Walian are preferentially of the same-polarity type, meaning DTQs with negative hosts consistently arise as NEG-NEG, a pattern that is otherwise uncommon crosslinguistically; see Rottet and Sprouse (2008: §4.5) for discussion.

As the discussion in Rottet and Sprouse (2008: 45-46) makes clear, this *yn* particle – which is optional in TQs – is unavailable in non-TQ negative questions.[42] This raises the question of whether *yn* is best analyzed as a tag-specific question particle of the sort we saw in Moyon in §4.1.3 (glossed there as 'TAG.Q'). Given that the verb in the tag clauses above in (65) inflects for interrogative mood ('INT'), I instead take *yn* to be similar to the *-rəy* marker in Tarao DTQs, and gloss it as a tag-specific morpheme 'TAG' (see §4.1.4).

Regardless of the precise analysis we give to *yn* (see also fn. 41), though, the fact that it only arises in TQs, and not in non-TQ polar interrogatives, means that the presence of tag-specific morphology we saw above in Moyon and Tarao[43] is not just a parochial property of Northwestern Kuki-Chin, but is instead a pattern attested in the TQs of unrelated languages. More importantly, the very existence of such markers poses a challenge for the idea that all (D)TQs are derived by ellipsis of an independently-available polar question in a given language. I return to this further below.

Before leaving the discussion of North Walian, however, one further set of facts (from Rottet and Sprouse 2008: 45) deserves mention here. In some tag clauses, certain high-frequency vowel-initial verb stems surface with a special prefix variably realized as [t-] or [d-], represented as ⟨D-⟩ in the examples below (its variable realization is not relevant here). Recall that the marker *yn* 'TAG' is optional in North Walian TQs. As it turns out, the presence of the ⟨D-⟩ prefix is dissociable from the presence of *yn* 'TAG', in that the former remains even when *yn* is omitted:[44]

(67) yn *and* ⟨*D-*⟩ *in North Walian* (adapted from Rottet and Sprouse 2008: (25a))

a. Dyn ni 'n cytuno, yn ⟨D-⟩ydyn?
be.1PL.AFF we PRT agree TAG D-be.1PL.INT
'We agree, don't we?'

b. Dyn ni 'n cytuno, ⟨D-⟩ydyn?
be.1PL.AFF we PRT agree D-be.1PL.INT
'We agree, don't we?'

Rottet and Sprouse (2008: §5) argue at length that the coda stop consonant of a historical negative marker, *onid* – which was used in the formation of negative interrogatives (inc. DTQs) – underwent reanalysis in North Walian, grammaticalizing as ⟨D-⟩. In its present-day state, ⟨D-⟩ no longer expresses negation itself (though it does generally co-occur with a negative expression in its scope: see fn. 44), making its appearance in DTQs striking. Interestingly, though, this ⟨D-⟩ prefix is not limited to DTQs alone: as noted in Borsley and Jones (2005: 254, fn. 4), it is also found in exclamatives:

(68) ⟨D-⟩oedd hi 'n oer y bore 'ma!
D-be.IMPF.3SG she/it PRT cold DEF morning here
'Was it ever cold this morning!'

This distribution – a marker that shows up in DTQs and exclamatives, but apparently not in information-seeking negative questions – has a precedent in the TQ literature: it matches the distribution and properties of the *-int* marker discussed in Jamieson (2018: ch. 4; to appear) and Thoms et al. (2023) for Glasgow Scots:

[42] "Whereas the *oni(d)* of F[ormal] W[elsh] serves to construct negative interrogatives (tags and otherwise), its [North Walian] offspring *yn* has been grammaticalized as *nothing more than a marker of* [...] *tag questions*" (Rottet and Sprouse 2008: 45-46; emphasis mine).

[43] Whereas the North Walian tag-specific morpheme *yn* 'TAG' can appear in both DTQs and ITQs alike (see (65)-(66)), the status of its counterpart in Moyon and Tarao ITQs is presently unknown: the published sources for those languages do not provide any examples of ITQs.

[44] See Borsley and Jones (2005: §3.3) for extensive discussion of ⟨D-⟩, whose primarily role is to mark the so-called *weak negative* series of verbs. They show that, overwhelmingly, verbs in this series must co-occur with some negative dependent in their scope (e.g. a negative adverb, a negatively quantified subject or object, etc.), for which they posit a *Negative Dependent Constraint* (Borsley and Jones 2005: 45). We are interested here only in the apparent exceptions to this set of environments (identified just below); thus, I completely leave aside the majority of cases involving ⟨D-⟩ (which all conform to this constraint).

(69) *Glasgow Scots* -int (Thoms et al. 2023: 751)

a. It was a lovely day, wint it? *DTQ*

b. Wint it a lovely day! *Exclamative*

c. *It wint a lovely day. **Declarative*

d. *Wint it a lovely day? **Negative polar-Q*

While developing a full analysis of North Walian ⟨D-⟩ is beyond the scope of this chapter, its similarity to Glasgow Scots *-int* should not be ignored. Moreover, its co-occurrence with *yn* 'TAG' – presumably itself the realization of some left-peripheral functional head (see below) – should help inform and/or refine the analyses of both phenomena.

We have now seen evidence that TQs in at least some languages – Moyon and Tarao, but also North Walian – can or must include some kind of marking which is apparently unique to tag clauses. While more empirical work is required to determine whether these markers are truly ruled out in all non-TQ environments, we can tentatively take the data at face value and consider their implications.

As mentioned above, the existence of tag-specific morphology poses a challenge to the general view advocated here that DTQs are underlyingly normal (biased) polar interrogatives: if a particular marker is only licensed in a DTQ, but not in the corresponding non-tag polar interrogative, then the simplest analysis for DTQs cannot be maintained, at least for these particular languages. At the same time, though, the evidence for ellipsis in the derivation of (D)TQs is overwhelming (see §3), as is the evidence for their interrogative status (see §4.1), and the new facts presented in this section do not warrant a retreat from these positions.

This state of affairs was anticipated to some extent by Jamieson (2018: 227-229), who considers and then rejects the possibility that DTQs might involve a unique clause type (*qua* a special C head) on the grounds that such an analytical move should only be made as a last resort: it represents a retreat from the simplest possible analysis in which no tag-specific tools are required whatsoever. As they put it, "to posit a separate C head for tag questions does not allow us to maintain this syntactic relationship between tags and matrix biased questions, instead requiring that tag questions are their own type of speech act requiring a specific C head" (p. 229). As it turns out, the facts concerning tag-specific morphology presented above do not actually warrant such a move, at least not exactly: for example, the TAG morpheme in Tarao is distinct from and co-occurs with the regular Q-particle presumably hosted on C; thus, while such tag clauses apparently involve a normal interrogative C head, they nevertheless also involve some other special left-peripheral head not found outside of TQs. These details aside, Jamieson's general point still stands: positing tag-specific syntactic properties comes at a cost, and yet we seem to have little choice given the facts reviewed in this section.

Faced with this outcome, we must ask what sort of morpheme TAG might be, given that it is evidently not a marker of interrogative mood. Without additional data, I can only offer speculative remarks here. One possibility is that TAG is an overt realization of the covert TAG-operator proposed for English TQs in Bill and Koev (2025: §2.1; see also the Pol and Σ heads in the analyses of DTQs from Culicover 1992 and Rezac 2013, respectively). They claim that this operator takes both the host clause and the tag clause as arguments and returns a complex speech act (i.e., a modal assertion and a biased polar question). If the tag clause is the complement of the head occupied by this TAG-operator (with the host clause in its specifier), then any overt exponent for that head would surface in the left periphery of the tag clause, consistent with the facts we have seen in Moyon, Tarao, and North Walian.

While this option seems promising (and potentially also compatible with the general approach to TQs and confirmationals put forward in Wiltschko 2021, this volume), it faces at least one challenge straight away: all else being equal, it predicts that *-rəy* 'TAG' in Tarao should surface outside of (to the right of) *-me* 'Q', contrary to fact: see example (63). Assuming nothing has inverted the linear order of these affixes (i.e., assuming their surface order reflects their External Merge order), it would appear that *-rəy* 'TAG' is generated below C, disqualifying it as a candidate for Bill and Koev's TAG-operator. From such a position, we might instead take *-rəy* to express some sort of modality (see also fn. 38); however, if this were the case, *-rəy* ought to arise in non-TQ environments as well, apparently contrary to fact (based on the evidence currently avail-

able: Singh 2002). At present, then, the precise syntax and semantics of tag-specific morphology warrants further investigation.

# 5 Conclusion

Focusing almost exclusively on the morphosyntactic and distributional properties of tag questions across languages, the preceding discussion aimed to consolidate much of what is known about this particular type of non-canonical question. Aside from the general value that any survey of the literature on a topic offers (which, here, was primarily confined to §2), novel progress was made in at least two major areas in the study of tag questions. The first concerns the elliptical properties of tag questions and their consequences (§3), and the second concerns the morphosyntactic marking of the clause type associated with the tag clause (§4).

After reviewing and strengthening the arguments that dependent tag questions are derived by predicate ellipsis (§3.1), I sketched a novel analysis of invariant tag questions as the product of clausal ellipsis (§3.2), extending the same reasoning long applied to the analysis of dependent tag questions to better understand why tag questions distribute the way they do across languages, and to clarify the basic building blocks involved in their derivation. The status of tag questions as ellipsis-derived phenomena carries important theoretical consequences reviewed in §3.3, for example regarding their value as diagnostics in the ongoing debate over the existence of V-stranding predicate ellipsis (§3.3.2). Although the necessary vs. sufficient conditions for a language to allow tag questions remains mostly unknown, taking stock of the crosslingusitic distribution of tag questions (§3.3.3) allowed us to put a finer point on the problem for the benefit of future work on this topic.

The chapter's focus then turned to the interrogative status of tag questions, an area where very little had been said previously. As a point of departure, I presented a novel microtypology of question-marking strategies within tag questions based on a closely-related but surprisingly-diverse group of languages in northeast India, namely the Northwestern Kuki-Chin subbranch of Sino-Tibetan (§4.1). The discovery of apparently tag-specific morphology also led to the conclusion that dependent tag questions may very well constitute their own interrogative clause type in some (perhaps all) languages (§4.3), requiring a slight retreat from the strongest possible analysis of dependent tag question clauses as underlyingly run-of-the-mill biased polar questions.

As a research topic, the set of phenomena we can call tag questions is a very big tent indeed, admitting a range of subtypes with puzzling properties across nearly all levels of linguistic description (only some of which I could do justice to in this chapter). A great deal remains to be understood about them. By highlighting several specific areas where fundamental mysteries remain and additional work is badly needed, I hope to have paved the way for future progress on the topic, as these are fertile grounds indeed.

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